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Virginia MEDICAL MONTHLY

OFFICIAL PUBLICATION OF THE MEDICAL SOCIETY OF VIRGINIA

CONTENTS

Guest Editorial. Harry J. Warthen, M.D., and Carrington Williams, M.D. ---------- 301

Compulsory Federal Sickness Insurance. Walter B. Martin, M.D., Norfolk, Virginia ---------- 303

The Diagnosis of Respiratory Allergy. Milton Millman, M.D., F.A.C.A., Bristol, Tennessee ---------- 309

Spinal Anesthesia. Charles Hamilton Lupton, Sr., M.D., F.A.C.S., and Lieut. (jg) Charles Hamilton Lupton, Jr., M.C., U.S.N.R., Norfolk, Virginia ---------- 315

Management of Adenomatous Goiters. R. M. DeHart, M.D., Radford, Virginia ---------- 320

The Skin Test as a Suggested Aid in the Diagnosis of Salmonella Suipestifer—A Case Report. John S. Morris, M.D., and Malene G. Irons, M.D., Richmond, Virginia-- 324

Primary Virus Mastitis from Mumps. Claude Marshall Lee, M.D., Charlottesville, Virginia ---------- 327

Spontaneous Passage of Open Safety Pin from Esophagus Into Stomach with Point of Pin Directed Downward—Report of Case. Porter P. Vinson, M.D., Richmond, Virginia ---------- 329

Tension Pneumothorax from Rupture of Esophagus—Report of Case. W. E. Pembleton, M.D., Richmond, Virginia-- 331

Continued on page 4.

Annual Meeting
Medical Society of Virginia
Virginia Beach—October 14, 15, 16

July 1946

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PARKE, DAVIS & COMPANY

DETROIT 32 • MICHIGAN

Virginia Medical Monthly

Vol. 73, No. 7.
WHOLE No. 1129.

RICHMOND, VA., JULY, 1946

$2.00 A YEAR
25 CENTS A COPY

GUEST EDITORIAL

The Training of the Graduate Nurse

THERE are many physicians and some graduate nurses who believe that the present policies and practices of the schools, associations, and boards for nursing have brought the profession to a critical cross-road. To continue on the course now being followed will lead to the disappearance of the graduate nurse as we have known her in the past. It is not too late to make a radical revision of the curriculum and restore the training of a graduate nurse to a sane basis. It is evident that many of the nursing educators have not had the vision or desire to produce nurses for the bedside care of the sick. Not many years ago in this State such pressure was brought on the small nursing schools that many were forced to close in spite of the fact that by and large they produced superior clinical nurses and this closure of the schools has been a major factor in the present shortage of nurses.

The solution now offered is to produce two classes of nurses, one with a curriculum more advanced than is now being followed and the other with a training period of only one year. The leaders of the Nurse Cadet Corps have recently envisioned the conversion of the large schools to the training of professional nurses and the smaller schools to vocational nurses. It is our opinion that two classes of nurses are not compatible, that one will fall and the other survive, and that the poorly trained vocational nurse will be the survivor.

The solution, we think, is not too difficult if the authorities in this State will seek a solution for Virginia without influence and pressure from other sources. We propose that the Virginia schools immediately convert to a two year course with substantial reduction of the didactic work. At the same time in the larger schools postgraduate courses should be offered for training in special lines. It would seem evident that a nurse graduating in two years is adequately trained for bedside nursing and would be superior to the one year graduate. For those with superior preliminary training, or desire and ability to specialize, the postgraduate year or years would offer unlimited possibilities.

The advantages of this proposal are:

(1) the shorter period of training and reduction of expense to the pupil would attract larger numbers.

(2) one class of nurse of high quality would be continued.

(3) better specialists would result from the planned postgraduate courses.

(4) the care of the sick would be restored as the primary objective of graduate nurse training.

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One of the major objections to be made by the nursing educators is that such a two year graduate would not be recognized by the boards in the majority of other states. The answer to this is simple; if she so desires the nurse can continue her education for another year and thereby become eligible to register in the 38 states which now require three years of training but it is our belief that many other states would quickly fall in line if Virginia would be the pioneer.

The basic law of Virginia and nine other states require only two years for training a graduate nurse and leaves the details of the curriculum to the Board of Nurse Examiners. It is therefore in the power of our Virginia Board of Nurse Examiners to make the change immediately. We request them to seriously consider making this change. It is an opportunity for Virginia to lead the nation out of a critical situation.

HARRY J. WARTHEN, M.D.
CARRINGTON WILLLIAMS, M.D.

People Suffer from 25 Different Knee Disorders.

Estimating that today there are at least 25 distinct knee disorders that have been proved by x-rays and surgery, Philip Lewin, M.D., of Chicago, says that the "efficiency of a person's knee is directly proportionate to his posture, muscle power, ligamentous support, bone structure, and the knee's ability to withstand normal and abnormal strains."

Writing in the current issue of *Hygeia,* health magazine of the American Medical Association, the author describes some knee disorders, injuries and their causes:

"Locking of the knee joint results when some structure gets pinched between the joint surfaces like a monkey wrench in the hinge of a door. The most common causes of locking are: injured semilunar cartilage; loose bodies in the joint; or a pinched fat pad or synovial membrane which encloses the joint.

"Chief infections of the knee are tuberculosis, syphilis, gonorrhea and the ordinary streptococci and staphylococci.

"Obesity may be harmful to the structures of the knee. This harm is greatly magnified if the person is bowlegged or knock kneed or has arthritis.

"Intermittent hydrarthrosis is one of the most unique conditions affecting human beings. Visualize a knee swelling every 11 days regularly for years. No injury; no infection. The routine swelling is usually interrupted during pregnancy and while nursing the baby, only to start again when these incidents are closed.

"It is known that some foods produce irritation of certain knees. This is true in cases of tomatoes and walnuts. Vitamin C deficiency can also cause synovitis or inflammation of the synovial membrane.

"Relation of the foot and ankle to knee disorders has been the subject of controversy. People with knee disturbances have foot and ankle troubles. Undoubtedly flat feet, weak feet, knock knees and bow legs may affect the knee. Correction of the foot and ankle condition is imperative whether or not it bears relationship to the origin of the knee strain.

"Dislocations of the knee are not common but may be serious because of injury to blood vessels."

Treatment of knee disorders may be conservative or surgical, the author states. The former includes rest, elevation, relief from bearing weight, traction, compression, local applications and aspiration of the fluid from the knee cavity.

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COMPULSORY FEDERAL SICKNESS INSURANCE*

WALTER B. MARTIN, M.D.,
Norfolk, Virginia.

Progress in the science of medicine and its application to the control and the treatment of disease has been outstanding during the past quarter of a century. The development and utilization of insulin, liver extract, the sulfa compounds, penicillin, plasma, whole blood and now streptomycine has lowered tremendously mortality and morbidity rates. Improved sanitary and public health measures, and more widespread immunization has limited the spread of disease to an extent not previously thought possible. The higher standard of requirements in medical schools, together with more thorough hospital training, has resulted in greatly improving the quality of medical practice. These results are strikingly exemplified by a comparison of the medical and surgical records of World Wars I and II. Death from battle wounds in the last war were slightly in excess of 3 per cent as compared to between 8 and 9 per cent in World War I. According to the Surgeon General of the army, this accomplishment was not so much the result of the use of sulfa compounds, penicillin and plasma as it was of improvements in surgical technique and the availability of large numbers of highly trained, qualified surgeons. Even greater comparative improvement in the rate of death from disease occurred in the last war. With certain notable exceptions, the skilled surgeons, internists and pathologists that made this accomplishment possible were not drawn from government facilities, but were recruited from the ranks of those who had received their training and gained their experience under the free system of medicine that heretofore has existed in America.

In considering the future of medicine in America, we might hope that these great advances in the science of medicine might be further accelerated, that the quality of medical care might continue to improve, and that those forces that have been so effective in the past might continue to control the destiny of medicine in America. This hope may not be realized. The pattern of medicine of the future may well be determined not by the orderly planning of men trained in the science and art of medicine, but by the direction of our political thinking, by whether we adhere to the liberal philosophy that recognizes the rights and dignity of the individual, or succumbs to the present trend toward national socialism with its emphasis on control by the state of the lives and destinies of its citizens. The lines are being drawn between those who believe in the gradual extension of medical care under our present free system, and those that support the revolutionary change that would be brought about by the adoption of compulsory federal sickness insurance. In its broad aspect, the proposal contained in section four of the President's five point program, and in Title II of the Wagner-Murray-Dingell bill to establish compulsory sickness insurance, will not only radically change the practice of medicine, but in the end may profoundly affect our political and social structure. Let us consider the bills now before Congress along with plans that have and are being urged by the medical profession.

In evaluating the several proposals for further extending medical service to the American people, some basis for comparison must be established. There can be little argument over the desirability of giving the people more and better medical care. Discussion centers on methods and procedures. We may well ask ourselves certain questions relative to any plan:

1. Will it increase the distribution of good medical care?
2. Will it improve or deteriorate the quality of medicine?
3. Will it stimulate or retard the advancement of the science of medicine?
4. Will the cost be within the ability or willingness of the people to pay?

It may be noted that one question is not asked—will it redound to the profit or loss of doctors as individuals? I do not believe that we as physicians can afford to approach this problem from the standpoint of our own selfish interest. Medicine with its manifold benefits belongs to the people. We are only the purveyors of it. It is true that as members of a learned profession we are the only ones competent to pass on the quality of what we produce. For this reason, the obligation rests heavily upon us to view the problem abstractly, and to render judg-

*Read before the Norfolk County Medical Society Spring 1946.

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ment uninfluenced by personal considerations. If it can be shown that by changing our system of practice the general welfare of the people will be advanced and the progress of medicine sustained and forwarded more effectively, then the system should be changed.

We as physicians are particularly concerned with the quality of medicine. I have said that the physician is the only one who can correctly evaluate its quality. I do not say this arrogantly, but with assurance that it is true. Some years ago, I heard one of the leading advocates of socialized medicine state to a large audience in this state that he was interested only in the distribution of medicine and not in its content. Only profound ignorance of the difference between good and poor medicine would allow anyone to make such a statement. Medicine is both an art and a science. Proficiency in its practice is gained only by arduous years of study and training. Its application to the correction of human ills is not simple, but presents many difficult and confused problems. Maintenance of high ethical and moral as well as professional standards is necessary if people are to be served. The relationship of the physician to his patient must be personal and confidential if the total sum of human woe is to be lessened.

With these thoughts in mind, let us examine some of the proposals that have been made and consider whether they will extend a higher quality of medical care at a bearable cost and promote the further advance of the science of medicine. Most of you are no doubt familiar with the President's five point program, the Hill-Burton bill and the Wagner-Murray-Dingell bill. On November 19th, the President presented to the Congress his health program for the nation consisting of five main items as follows:

1. Federal grants in aid to states for construction of hospitals, diagnostic centers and health centers.
2. Expansion of public health service, and extension of maternal and child health service.
3. Federal grants for medical education and research.
4. The setting up of a federal compulsory sickness insurance system.
5. Expansion of our present social security system to provide compensation for loss of wages from sickness and disability.

These are not new concepts. All of them have been included in the several bills previously presented to Congress, e.g., the earlier Wagner-Murray-Dingell bill, the Pepper bill and the Hill-Burton bill. The medical profession has endorsed them in principle except the plan for federal compulsory sickness insurance, although it objects strongly as to how certain of them are to be implemented.

The proposal relative to construction of hospital and related facilities as embodied in the Hill-Burton bill has the wholehearted approval of the American Medical Association and the American Hospital Association. This bill has passed the Senate and is pending in the House. It provides seventy-five million dollars annually over a period of five years to aid the states in extending hospital, laboratory and health center facilities in areas where the need can be demonstrated. It provides for a careful survey by the states to determine such needs and a preliminary sum of five million dollars to aid in making such surveys. Under the terms of this bill, there would be a gradual and orderly development and extension of medical facilities in areas where the need exists. It should be possible to recruit and train personnel to operate these facilities in keeping with their development. This is a forward looking, progressive measure which should aid particularly in the solution of the problem of rural medicine.

The second Wagner-Murray-Dingell bill, S-1606, covers the second, third and fourth points in the President's program and was presented to the Congress the day following the President's address. The fifth point in reference to compensation for loss of wages from sickness or disability has met with no opposition from the medical profession, and will not concern us today.

Title I of S-1606 provides grants to states for health service. Part A of Title I is concerned with grants to states for public health service—particularly for the prevention, treatment and control of tuberculosis; the prevention, treatment and control of venereal disease; the extension of public health work in areas not covered; and the training of personnel. This bill provides for the administration of these funds by the Surgeon General of the Public Health Service subject only to the Social Security Administrator. The Surgeon General is provided with a technical advisory council without policy making power, and appointed by himself. Part B of Title I has to do with grants to states for maternal and child health service. It provides that where

facilities are furnished under the plan, they shall be available to all mothers and children who elect to participate. The crippled children program is also made available to all crippled children regardless of financial status. This service is administered by the chief of the Children's Bureau subject only to the Secretary of Labor. Again, there is a technical advisory council without policy making power and appointed by the same authority that it advises. Part C of Title I provides for grants to states for medical care of needy persons. This is administered directly by the Social Security Board in cooperation with the chief of the Children's Bureau and the Surgeon General of the Public Health Service.

Title II—The heading under this title is "Prepaid Personal Health Service Benefits". This is another way of saying compulsory federal sickness insurance. This insurance covers the following groups:

1. All employed individuals, including self-employed.
2. All of their dependents.
3. All individuals entitled for any period to monthly benefits under the Social Security Act.

It is administered by the Surgeon General of the Public Health Service under the supervision and direction of the Federal Security Administrator. Under its provisions, the Surgeon General will appoint state and local committees, or boards, to aid in the administration of this law.

The Surgeon General will appoint a sixteen member national council whose duty it will be to advise him.

Services which shall be deemed to be specialist or consultant services will be so designated by the Surgeon General.

Specialists or consultants will be those so designated by the Surgeon General.

The Surgeon General may fix the number of patients that can be served by one practitioner.

This title undertakes to provide full home and hospital, medical, surgical, dental and nursing care for most of the people in the United States, and without regard to income or financial status. It is set up under the complete control of the Surgeon General of the Public Health Service subject only to the Social Security Administrator.

In contrast The American Medical Association by direction of its House of Delegates and acting through its Board of Trustees and its Council on Medical Service and Public Relations urges:

1. A reasonable standard of nutrition, sanitation, housing, clothing and recreation. It is obvious that much of disease is due not to poor medical care, but to low general standards of living based on economic deficiencies. If we are to build on a broad base there must be a gradual adjustment of these factors. Nearly 50 per cent of our population is without benefit of sewerage and in some states as high as 78 per cent. A large percentage of rural dwellers are without a protected water supply. Prior to the war, over 18 per cent of all dwelling units in the United States were substandard. This varied in different states and reached a peak of over 39 per cent in one state. Dietary deficiencies are common, especially in certain areas, and there are also deficiencies in clothing and recreational facilities. That these factors significantly affect our disease rate cannot be questioned.

2. The provision of preventive medical service through professionally competent health departments with federal and/or state aid to localities unable to provide such service. The medical profession was instrumental in establishing the first public health service, and has constantly and consistently urged the extension of this service so as to provide the maximum preventive care for all of the people. Governmental aid is needed to extend public health service into many areas in this and other states not now covered, and to further develop and perfect existing services. Organized medicine insists that public health units be headed by professionally qualified men and that they remain free from political control. The care of the sick is, however, not a function of health departments and the line of demarcation between preventive and therapeutic medicine should be strictly maintained.

3. That medical and hospital care be provided for the medically indigent through local, state and federal funds. These funds should be administered by local agencies, public or private. It is to the credit of this community that such a plan has been working well here for more than ten years. Our local hospital association receives funds from several political subdivisions and from these funds reimburses the hospitals for the care of needy patients. It undertakes to act as a central admitting office and through its social workers determines the eligibility for public assistance of those that apply for free

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hospital care. State funds are now available to communities on a matching basis to further extend the care of the medical indigent.

4. That procedures established by modern medicine for advice to prospective mothers and for adequate care in childbirth, and for the care of the growing child be made available to those unable to pay by means of local, state or federal funds. Again, these funds should be administered by local agencies. The American Medical Association disapproves the provisions of the Pepper bill for extending such service under federal direction to all mothers and children regardless of ability to pay and the extension of the state of infancy to twenty-one years.

5. The provision of hospital, diagnostic centers and health centers where the need can be shown to exist. These should be established and operated by local organizations and should be financed by local funds as far as possible. When, after study by competent groups, needs are shown to exist beyond the ability of the locality to meet them, state or federal funds should be made available. Proper dispersal of good medical facilities is a prime requisite for a better distribution of good medical care. Administration should be local with the state and federal governments establishing the standards. The Hill-Burton bill, which provides a plan and the funds for such extensions of medical facilities, has the full backing of the organized profession.

6. The establishment of voluntary non-profit prepayment plans for both hospital and medical care. At present about one-third of our population, (40,000,000) are covered by some form of health insurance. Approximately 19,000,000 are covered under the Blue Cross Plan. The Committee on Public Relations and Medical Care and the Board of Trustees of the A.M.A. have endorsed the principle of voluntary prepayment for medical care, and have granted the Associated Medical Plans, Inc., very substantial sums with a view of furthering its work. Associated Medical Plans, Inc., will aid in establishing new plans, support plans already in operation and act as a national clearing house for coordinating the various state and local plans. It is felt that through this agency a tremendous impetus will be given to voluntary non-profit health insurance, and that the problem of writing national business organizations can be solved. The Board of Trustees of the A.M.A. has established standards of acceptability for voluntary plans, and will give official recognition to all plans meeting these requirements. These plans may permit the coverage of the medically indigent group for both medical and hospital care by purchase of policies for such individuals by local, state or federal governments.

7. Medical care, including hospitalization, for veterans. The A.M.A. supports the plan of General Hawley to provide medical and hospital care for veterans as far as possible in their own locality and by physicians of their own choice. Already, certain states, notably Michigan and New Jersey, have made agreements with the Surgeon General of the Veterans Bureau for carrying out such a program.

8. A National Science Foundation for promoting the science of medicine. This is a continuation in principle of the National Research Council which rendered such great service during the war. The A.M.A. is opposed to setting up this foundation under a dictator with an advisory council with power only to advise. It is strongly felt that the Council or Board should exert control over the administrative head of the foundation, and should determine policies.

9. That voluntary philanthropic health agencies be encouraged.

10. That widespread education in field and public health and disease prevention be encouraged and stimulated in every way. Many of our difficulties arise from ignorance on the part of the laity of what constitutes good medical care and how it may be produced.

These are the proposals and plans of the medical profession. They are not in essential conflict with the Hill-Burton bill or of certain provisions of the original Wagner-Murray-Dingell bill and some of the President's proposals. They are, however, sharply in opposition to all plans for national compulsory insurance, and all proposals that tend to set up under the federal government control over the practice of medicine.

Time does not permit full discussion of all of the reasons for this opposition, but some of the points may be briefly considered.

If medical service were a commodity that could be produced on an assembly line, packaged and delivered like a commercial product, a national compulsory insurance plan might be the ideal medium for such distribution. Medical care, however, is to

a considerable extent intangible. To be sure, facilities are needed, but more than that the body of good medicine depends upon the character, integrity and devotion of its practitioners, and the confidence of the patient in his advisor. A great impersonal organization can distribute medical care, but it will be a diluted and debased article. The belief held by many otherwise well informed people that providing good medical care is merely a matter of multiplying medical equipment and facilities is simply not true.

The words *adequate* and *inadequate* are frequently used in reference to medical care, but no one has yet satisfactorily defined adequate medical care. Surveys have been made of our medical resources by certain interested organizations and conclusions drawn on the basis of insufficient data. One of the most ambitious surveys was made by the Committee on the Cost of Medical Care for the American People. In publication No. 26 of this committee it is stated that 9.8 per cent of the sick receive no medical care. When one examines their definition of an illness, however, the shock of this statement is softened. An illness is defined as "any disorder which wholly or in part disables an individual for one or more days, or an experience for which medical service of any kind is received, or any condition, symptom or disorder for which drugs costing fifty cents or more are purchased." It is obvious that adequate medical care involves many things that cannot be catalogued by untrained investigators standing on door steps. After all, adequate medical service, like adequate food, adequate shelter, adequate clothing and adequate recreation is a relative matter and can best be judged by the quantity and quality of medical service received by people of other civilized nations. By every standard, the American people receive the best medical care of any nation in the world. This statement is borne out by both morbidity and mortality statistics. Comparison with England and Germany are to the point since Germany embarked on a program of socialized medicine under Bismarck in the eighties and England on a modified form more than thirty years ago. These two highly industrialized nations with homogenous populations and a high degree of general culture have not been able to equal the record of free medicine in the United States. This in no way means that our present system of practice is perfect or that there is not room for vast improvement. It does mean, however, that any proposal to socialize medicine in this country should be subjected to critical analysis.

Much use has been made of the figures on draft rejections as an argument for the need of a system of socialized medicine. The President in his address refers to the nearly five million rejected. The actual figure is 4,217,000. Of this number, 701,700 were rejected for mental disease and an additional 582,100 for mental deficiency. Over 900,000 additional rejections were based on blindness, deafness, mutism, loss of limbs, congenital deformities or skeletal defects, congenital eye defects and similar conditions largely non-remedial. This leaves a net residue of approximately two million—quite different from the nearly five million quoted. This last figure is by no means inconsequential, but it should be remembered that thousands of those rejected would have been capable of rendering effective service under a less inelastic military system, and are destined to comfortably live out a normal life expectancy as useful and productive citizens.

In 1932 the survey made by the Committee on the Cost of Medical Care for the American People estimated the total cost as $3,650,000,000. Of this, $485,000,000 was spent on cultist or for the purchase of patent medicine. Of the three and a quarter billion left, less than 30 per cent represented professional fees. The remainder covered the cost of dental and nursing care, hospital service, drugs and similar services. What will be the cost of federalized compulsory sickness insurance? No one actually knows, but it probably will be in the neighborhood of eight to twelve billion dollars per annum. The proponents of the Wagner-Murray-Dingell bill carefully avoided in drawing the bill any reference to cost or to how the cost is to be met.[1] It is generally considered that the money will be raised by some form of payroll deduction. The amount of this is variously estimated as from 4 to 6 per cent. This will be applicable to about seventy million workers. In view of past experience, it is improbable that this will come out of the pockets of the workers or the profits of the employer. The worker will demand an increase in wages so as to provide the same or higher take home pay, and the producer will pass the cost

1. More recently in discussing this bill, Senator Wagner has suggested a tax of 3 per cent on payrolls equally divided between employer and wage earner; the sum thus raised to be supplemented by appropriations from general funds.

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on to the consumer in the form of increased prices. The consumer will be compelled to meet this new tax burden of 4 to 6 per cent. The cost of medical care for the American people will have been quadrupled to furnish care for the employed group only. The unemployed, the unemployable and the whole group of medical indigent are not provided for under this title. The American people will have to dig still deeper in their pockets to care for these other groups. It is doubtful if this country can afford such a medical bill plus all these extras.

Payroll deduction is an attractive and seemingly simple method of raising funds. It permits no evasion of the tax. It does not, however, provide a stable source of revenue. During depressions with falling wage scales and unemployment, revenue from such a source will fall. It is exactly at such a time, however, that the greatest demands will be made on the medical services provided. Economies will become necessary, and we can be sure that they will not be made first in the administrative overhead.

If the money can be raised, will it—except for a reasonable overhead—be spent for medical care? Experience in other countries suggest otherwise. A swarm of new government employees will come into existence, boards, inspectors, recorders, clerks and stenographers until the cry of the sick is submerged in the rattle of the typewriters.

Under this bill the control of federal funds is vested in the Surgeon General of the Public Health Service. True, he will have an advisory board, but this board is appointed by the same authority and has no directional power. The medical profession will have only a minority representation on this board. We all respect the ability and integrity of the present Surgeon General of the Public Health Service, but we have no way of evaluating his successors, nor the amount of political pressure to which they will be subjected.

The medical problems and medical needs in different states vary widely. South Carolina and South Dakota, New York and New Mexico have entirely different problems. It is the conviction of the medical profession that local situations can be best understood and met on the state and local level.

This bill proposes to release the worker and his family of all responsibility for their health and medical welfare. This is another great step toward complete social security say the social dreamers overlooking the fact that it is another great step away from personal liberty and toward dependency on the federal government. Security can only be gained at the expense of liberty. The perfectly secure individual is the life termer in a well-ordered penitentiary.

Title II of the Wagner bill proposes a tremendous expansion of medical service without defining the need, or even attempting to estimate the cost. The proponents of this measure display little knowledge or concern as to what are the components of good medicine or of what are our relative medical needs. Aside from objections to the Wagner bill on medical grounds, its greatest danger lies in its effect on our political life. It will create another huge fund to be expended by agents of our central government. It will call into being another great group of government workers dependent upon these agents for their daily bread, and it will enthrall one of the few remaining large groups of educated free men.

The American Medical Association, representing through its House of Delegates over 125,000 physicians, has proposed and is urging plans for extension of medical care to the American people on a state and local level—plans that will leave to the individual freedom of choice and to the profession the opportunity to continue the great expansion of the science of medicine that has made American medicine outstanding in the world in this generation.

7520 North Shore Road.

THE DIAGNOSIS OF RESPIRATORY ALLERGY

MILTON MILLMAN, M.D., F.A.C.A.,
Bristol, Tennessee.

The purpose of this paper is to emphasize the necessity of working up cases of respiratory allergy in a thorough manner. We are dealing with a phase of medicine where the finding of the etiological agents is essential to the ultimate relief of the patient. Haphazard study and treatment are necessarily going to end in unsatisfactory results both for the patient and the physician. On the other hand, a formulated plan based on a thorough understanding of the basic principles of allergy will elucidate problems which in reality are relatively simple. Lack of such a plan and the enthusiasm of the doctor and patient to carry out the plan will result in failures in cases where the etiological agents are obvious if only looked for.

With this in mind, it should be clear that there is no room for anything but a thorough study of the allergic patient. It is true that in many cases of seasonal hay fever and asthma, after a short history and physical examination together with a few skin tests, the physician can outline a schedule of therapy and obtain excellent results without further ado. But there are many cases that superficial diagnosis will result in incomplete or incorrect handling and, in the end, the patient notes little or no relief from his allergic symptoms. It is therefore imperative for most suspected allergic patients to have a thorough history taken and a thorough physical examination performed together with any necessary laboratory data. I might add that it is essential for every man doing respiratory allergy to be a good internist.

DIFFERENTIAL DIAGNOSIS OF ALLERGIC FROM NON-ALLERGIC CONDITIONS

This is not always a simple matter and cannot be determined by doing a series of skin tests alone.

1.—*Bronchial Asthma*—

A patient of mine, fifty years of age, had been treated for several years as a case of allergic bronchial asthma because of nocturnal attacks of dyspnea and wheezing. His relief was minimal. On physical examination his blood pressure was found to be 240/130 and therapy against this phase of his illness with rest, phenobarbital and nitranitol gave a fair amount of symptomatic relief without an appreciable constant drop in blood pressure. There was no allergic history and the results of the skin tests were really not conclusive when taken with the history and physical examination. It is my feeling that allergic therapy in this type of case is not particularly good medicine.

Asthmatic breathing with wheezing may not be allergic asthma and in people over 40 years old frequently is not. Hypertension and luetic heart disease may cause a so-called "cardiac asthma" with typical wheezing. Aneurysm, bronchogenic carcinoma, hyperthyroidism, hysteria and psychoneurosis may all cause attacks of dyspnea and at times wheezing. In children, an acute infection with bronchiolitis may cause typical and generalized wheezing in the chest which is really an asthmatic type of bronchiolitis and not true bronchial asthma. With the subsidence of the infection, the so-called "asthma" clears up, but may return if there is a new acute infection. Foreign bodies in the respiratory tract may also cause attacks of dyspnea and wheezing. It would be tragic to call such a case bronchial asthma, perform skin tests, and start treatment on this basis.

A complete physical examination together with any necessary laboratory data and x-rays will solve a number of problems which may remain a mystery otherwise.

2.—*Hay Fever and Perennial Vasomotor Rhinitis*—

The differential diagnosis between the allergic and the infectious states is not always an easy matter. The two may be combined. The allergic state may precede the infectious state, or follow it. In such a case maximum relief can be obtained only by handling the case from both points of view at the same time.

A typical, pale, edematous, nasal mucosa when seen should put the attending physician on guard. It must be remembered, however, that the typical nasal mucosa may not be seen, and yet the condition still may be allergic.

Nasal and sputa smears for eosinophiles and neutrophiles, x-rays of the sinuses and chest, complete x-rays of the teeth as part of the dental examina-

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tion, chemical and microscopic examination of the urine and complete blood count will go far in the establishment of a correct diagnosis.

If the physician in doing the allergic work-up will keep in mind the classical characteristics of allergy, he will find the problem much easier. The sudden onset, short duration, sudden offset, symptoms brought on by a specific exciting agent and relieved by removal of the offending agent, reaction to epinephrin, eosinophilia in blood and tissues, and family history of allergic disease are the classical characteristics which will help tremendously in making a differential diagnosis. Of course all these characteristics may not be present in any one case, but the more that are present, the more certain is the diagnosis of an allergic state.

SEARCH FOR THE ALLERGENIC AGENTS

When a diagnosis of an allergic rhinitis or bronchial asthma is made, only a part of the problem is solved. The next step is to find the allergenic agents responsible for the present condition. Again, it must be emphasized, there is no room for halfway measures in the diagnostic studies and therapeutic program for the management of an allergic individual. The allergist must be a first rate detective, and absolute cooperation of the patient is essential. But this is not difficult in the average case and does not take as long as one might think if a regular program is followed.

HISTORY

This is the first and most important part of this phase of the diagnostic study. It is obtained in part in the first few interviews and later during the course of the observation. A diary of the patient's diet and activities should be included as part of the history. In this account it is well to record the daily diet of the patient, any unusual activity, and the time, date, duration and severity of the allergic attack. It is a frequent occurrence that such a diary when analyzed will reveal the chief offenders when other methods have failed.

At the first interview, the usual medical history, including family history and past medical and surgical illnesses, is obtained. This should also include such facts as venereal, social, occupational, menstrual and obstetrical histories. It must include a complete story of the present illness with symptoms and how these have progressed. This is followed by a careful allergic history. Important questions in this history are as follows:

1.—*Initial Onset of the Condition*—

This includes the age of the patient and time of the year when the condition was first noticed. It should go all the way back to the time of the earliest symptoms no matter how mild. An onset in childhood usually starts with a food allergy. Subsequent allergies develop on top of that. An onset in one of the pollen seasons suggests the nature of the pollens which first caused the allergic state. It is a general rule that untreated allergic states tend to become more severe and difficult to handle as time goes on because of the addition of sensitivities to more and more offending agents.

2.—*Seasonal Incidence*—

It is important to determine the seasonal incidence or seasonal exacerbation of the allergic condition in question, as this gives an important lead to the nature of the offending agents. The seasonal manifestations of an allergic state will determine the nature of the allergens used in treatment. Thus skin sensitivities to trees whose pollination period is April or May are not causative factors in patients whose symptoms are from August 15 until frost.

3.—*Freedom Between Attacks*—

4.—*What Aggravates the Condition?*—

Many patients will accuse chilling, nervousness and respiratory infection. All of these factors may and do play a part in some cases, but it is not to be forgotten that there is usually a definitely allergic basis underneath. The case is frequently a subclinical sensitivity which, by the lowered resistance of infection, precipitates an allergic state. Here the exciting factor is a physical agent, but the basis is a true allergy.

This same state of affairs is frequently found with infection. Infection may or may not be a basic cause of an allergic condition. It, too, may be an exciting factor, lowering resistance so that a subclinical sensitivity shows up.

5.—*Climate Factor*—

In the military service this factor is of tremendous importance. Definite statements as to the effect of warmth and cold, wetness and dryness are extremely valuable historical notes which aid in evaluating the full story of any allergic case.

6.—*Geographical Location*—

This may mean climate, street, home or even a single room. Questioning as to whether attacks are worse indoors or outdoors is important under this heading. Patients sensitive to house dust and feathers are naturally worse indoors than outdoors.

7.—*Time of Day Attacks Are Worse*—

Most pollen allergies are worse in the morning and evening. Patients with intrinsic allergy have constant complaints during the day and night. Patients sensitive to feathers or other parts of bedding are worse at night.

8.—*Duration of Attacks*—

Pollen allergy is usually of short duration; food allergy is usually of much longer duration. Any patient, previously well, who presents an allergy of 3-5 days' duration, should be routinely suspected of having a food allergy. If a patient states that he has eaten a known offender, he can expect to have trouble which may last as long as 5 days. This may be explained by the long interval of time between the ingestion of the food and its complete elimination. The attacks usually begin one or more hours after ingesting the offending agent. An infectious allergy, too, gives prolonged attacks.

9.—*Family History*—

This is an important question because those with a family history of allergy have a tendency to be allergic themselves. An allergic family history should include all blood relatives, aunts, uncles, cousins, parents, siblings, and grandparents.

10.—*Occupation of the Individual and Members of the Family*—

11.—*Diet*—

This may give important leads. It may be necessary to give the patient a diet to start with. This may be of several kinds.

(a) Elimination diets of Rowe.
These are several diets which may be interchanged if they are not satisfactory after about a week.

(b) Basic diet principle.
The diet is brought down to a few relatively non-allergic substances with no attempt to make a balanced diet. For example, I have made a complete schedule consisting of nothing but tea, carnation milk, rice, sugar, rye crisp, and jello. Then when the attacks were under control I added one food at a time in large amounts twice a day. If no attacks ensued after a few days' trial, a second food was tried. The usual offenders, whole milk, fish, eggs, chicken, meat, chocolate, spinach, pork, orange, tomato, nuts, and skin positive foods were left until last.

(c) Planned diet based on the history, skin tests, and knowledge of the most common offenders.

12.—*What Does the Patient Think Is the Cause?*

13.—*What Gives Relief?*

14.—*Miscellaneous Questions Pertaining to the Leads Already Obtained by This Time*—

Social history may be important especially where there is a psycho-neurotic background. A very good analysis of history taking in allergy can be found in the account of Swineford & Weaver.

PHYSICAL EXAMINATION

A thorough physical examination is essential to a good work-up. A careful scrutiny of the eyes for conjunctival injection, lacrimation and evidences of itching may give a lead toward the symptoms of hay fever or other ocular pathology. The reaction of the pupils to light and accommodation may suggest the diagnosis of syphilis and possibly help rule out an allergy. During the nasal examination any evidence of polyps, paleness, edema or bogginess of the nasal mucosa should be noted. A careful evaluation of the physical findings in the heart and the blood pressure must be included to rule out cardiac pathology and hypertension causing a so-called "cardiac asthma" which must be differentiated from a true allergic bronchial asthma. It may be necessary in some cases to have an electrocardiogram taken. The further examination of the chest for evidences of emphysema and the typical expiratory sibilant and sonorous rales must be included in any thorough physical examination.

At this point it must be emphasized that a complete physical examination of all systems is necessary to rule out non-allergic conditions. This examination may also bring to light other allergic shock organs present in the same patient with respiratory allergy. It should be noted also that a dental consultation with full mouth x-ray is an important part of this physical examination. Unfortunately the dentist cannot always pick up an abscessed or devitalized tooth on oral examination and without

XUM

a full mouth x-ray, foci of infection in the teeth will be missed no matter how careful the dental examination.

LABORATORY DATA

1.—*Nasal and Sputa Smears for Eosinophiles and Neutrophiles—*

A high percentage of eosinophiles suggests an allergic basis for the respiratory complaint; a high percentage of neutrophiles indicates an infectious basis of the complaints.

2.—*X-Ray of the Sinuses and Chest—*

X-ray of the chest will enable the diagnostician to rule out other organic diseases as a cause of the chest findings. These conditions include enlarged heart, tuberculosis, foreign body, aneurysm, large mediastinal lymph nodes, etc.

X-ray of the sinuses is necessary in the search for foci of infection and to rule out organic changes in the paranasal sinuses. It must be remembered that an allergic nose may predispose to sinus infection and then the individual may become allergic to the subsequent infection. Likewise, a previous infection of the paranasal sinuses may cause a bacterial allergy in the nose as a superimposed factor. In either case, the end result is a vicious cycle and both factors must be understood and controlled for maximum relief.

3.—*Complete Blood Count and Urine Examination for Sugar, Albumen, and Microscopic Examination.*

4.—*Allergy Testing.*

5.—*Any Associated Study Indicated by the Previous History and Physical Examination.*

ALLERGY TESTS

The main tests are scratch, patch, intradermal, ophthalmic and passive transfer. Of the intradermal and scratch, the former is more accurate but far more dangerous. It should be performed with dilute extracts at first and not too many tests at once. When a reaction occurs, a tourniquet should be placed above the site of the infection and epinephrin should be given in the other arm.

Reactions to Skin Tests—

A strongly positive reaction is a large area of redness together with a wheal and pseudopods. Generally there is itching and not uncommonly the whole arm will swell up in the very marked cases. The reactions are usually graded negative to 4 plus, a redness and small wheal being 1 plus.

Interpretation of Skin Tests—

An interpretation of the findings of the skin test examination should be made in the light of the other findings in the case. Important points to remember in this connection are as follows:

1.—The reaction of the skin varies in even the same patient in different locations on the body. There are refractory areas on the skin of some individuals which may give a false negative reaction. Where a negative reaction is obtained and the substance in question is suspected, it is wise to repeat the test one or more times.

2.—Positive tests should be repeated for verification to obviate the possibility of a skin reaction to the irritant qualities of the solution rather than to the antigen itself.

3.—Careful analysis of the results of the skin tests

(a) Some individuals will seem to react with 3 or 4 plus to almost all tests you use. It is possible that the results may be as true as they seem, but not infrequently this is a reaction by the skin to any irritant. To overcome this factor, it is wise to use several controls, and, if necessary, a Passive Transfer Test.

(b) Some individuals will react with only 1 or 2 plus response. These should not be disregarded, as sometimes this will be the only reaction noted, and yet the person has a strong sensitivity to the agent. If it is recalled that skin tests represent a reaction to the reagins in the skin and that these reagins may be minimal in the skin while marked in another tissue, this may be understood.

(c) A positive reaction on the skin may represent a past sensitivity or a present or future sensitivity. Likewise, there are many antigens which are group specific. Thus 4 or 5 agents may give positive reactions and yet only one may be the offending agent. Therefore, it is important to divide the reactions into clinical and non-clinical positives. In my opinion, however, when treating a perennial allergy in particular, all positive reactions should be considered in making out the therapeutic program.

XUM

Those substances which can be removed from the patient's environment (e.g., foods, inhalants, drugs) should be eliminated at the start of the therapy. Later, when the allergic condition is under control, the suspected agents may be added one at a time. At the same time desensitization should be instituted against those antigens which are clinical positives and against which desensitization is known to be of value. There is no need to treat a case with a positive reaction on the skin if there is obviously no clinical sensitivity.

(d) Some allergists send out reports of skin tests in chart form—recording results in pluses. This report is of no value without an interpreation of the other findings of the case.

(e) Number of skin tests necessary.
I do not believe that more than 50 tests are necessary except in unusual circumstances. The grasses are generally considered to be group specific for the antigenic protein. Plantain is not a grass and therefore has a different antigenic protein. Thus, testing and treatment with timothy and plantain covers practically all the pollen in the so-called grass season from about May 15 to July 15 in most parts of the country. Therefore, there is no need to test to red top, Johnson grass, Bermuda grass, red vernal, etc. Likewise, giant and low ragweed have the same protein antigen, so it is only necessary to test and treat to one or a mixture. Goldenrod has been frequently accused by the layman. It has a heavy sticky pollen, so does not carry far and thus is an infrequent cause of trouble. There is no need to test for this routinely. In this connection, it should be recalled that for a pollen to be a frequent cause of trouble, it must be light in weight, and produced in abundant quantities; there must be wind to carry it great distances; and it must carry the offending antigen. Trees are the other main causes of seasonal allergy but are not as frequent as the grasses and weeds. In any one area, a study of pollination calendars will help in the finding of pollens in that area. An excellent chart may be found in Urbach's book "Allergy."

Not a great number of food tests are necessary because this information is better obtained from diary and diet. The usual foods should be tested for, but it is not necessary to test to more than 25, except in unusual cases. Milk, eggs, chicken, meat, fish, shell-fish, chocolate, cornmeal, beans, peas, spinach, orange, tomatoes, and wheat are common offenders and should be tested. It is also wise to test to other less common offenders which are common edibles in any one section of the country. The inhalants usually used are dust, cat dander, dog dander, horse dander, rabbit dander, feathers, cottonseed, flaxseed, kapok, silk wool, pyrethrum, orris root, and tobacco. It is not necessary to test for molds routinely.

(f) At times the skin tests may be negative, especially with foods, and yet there may be a strong sensitivity present. Thus, negative reactions to foods in particular should not be disregarded if a clinical history exists. In fact, the clinical history should be regarded as more important and feeding tests carried out for verification if necessary.

POLLEN DIAGNOSIS FOR TREATMENT

A diagnosis with positive skin tests to pollen and a positive history must be further subdivided for treatment. Allergic subjects have varying sensitivity on the skin, usually classified as "A", "B", "C", "D", the latter being the least sensitive. Here a discussion of standardization is imperative. There are three main methods—the total protein, protein nitrogen and the pollen count. The latter is unsatisfactory because it does not measure the excitant itself and this is variable in the pollen. The other two methods are good, but it is wise to pick one and stick to it.

In the protein nitrogen method, 0.00001 mg. of protein nitrogen is labeled one protein nitrogen unit. With this standardization, tests are performed to 10, 100, 1,000, and 10,000 units of the pollen by intradermal method, but using the weaker strengths first.

A 4 plus reaction to 10 units is class "A"; to 100 units is class "B"; to 1,000 units is "C", and to 10,000, class "D". Then charts are available which give the testing schedule for each class, beginning with about 5 units for class "A", 20 units for class "B", 30 units for class "C" and 50 for class "D". These usually go up to 1,000 units, 5,000 units, 14,000 units and 14,000 units as the maximum doses, respectively. These charts are only guides, however, and subsequent doses and the maximum doses depend on the clinical response of the patient and the reaction.

When using these potent extracts, the allergist must know his extracts and the dosage he is giving. In the event of a reaction, a tourniquet should be applied above the site of the injection so as to impede the venous return. At the same time, epinephrin is given in the opposite arm. The next doses must then be smaller than the one that caused the reaction. Further increases may not be necessary or should be done carefully and slowly.

SEASONAL ALLERGY

It is best to do routine testing in seasonal allergy cases to get the most favorable result. It is not infrequent that an individual with only seasonal allergy will have a subclinical allergy all year round and when the particular season occurs, the allergy cannot be controlled by pollen treatment alone. Here the other factors must be controlled during the season.

COMMENT

No attempt has been made in this paper to include all phases of the allergic diagnosis of the allergic disease. An attempt has been made to bring out the important facts which must be considered in most cases. It must be emphasized that the handling of an allergic case is not difficult but must be meticulous if the best end results are to be expected. First, it is important to separate the allergic from the non-allergic states; secondly, the various agents causing an allergic state must be elicited and the relative part each plays in any one case must be interpreted. In studying each patient the possible causative allergens, inhalants, foods, drugs, contact, serum, physical agents, and infection must always be kept in mind. The role each plays must be interpreted and separation of the minor from the major allergens must be made.

A simple report of skin tests with treatment to the positive reactions thereby shown will necessarily result in failure in many cases where, had there been a careful interpretation of the patient as a whole, the problem would have been simplified. A 4 plus skin reaction does not necessarily mean that there is an allergic state present; a negative skin reaction does not necessarily mean that allergy does not exist.

SUMMARY

1.—It is essential to treat the allergic subject as a whole and control all factors including physical factors as early as possible in the management for the most favorable effect.

2.—Absolute cooperation between patient and doctor is necessary and the physician must watch for a break in the routine by the patient, such as eating a known offending agent.

3.—Allergic patients are miserable and get worse as time goes by. They deserve careful study. This is not difficult if a definite plan of action is followed.

RECAPITULATION

An emphasis is placed on the need for a meticulous diagnosis of routine cases of respiratory allergy. The first phase of the allergic diagnosis is the differentiation of the non-allergic from the allergic states. The next phase is to find the allergenic agents causing the state of hypersensitivity and to determine the relative importance as causative factors of each of these agents. Important questions in the allergic history are discussed and the need for a careful physical examination and laboratory study is brought out. A plea is made for a careful evaluation of the patient and findings as a whole. There is no attempt to outline a complete diagnostic study of any given case, but the factors which the author believes to be most important in the routine diagnosis of most cases are presented.

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Seventh and Anderson Streets.

SPINAL ANESTHESIA*

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Spinal anesthesia is perhaps the safest and best method of anesthesia in surgery below the diaphragm, especially that which requires considerable relaxation, provided the following requirements are fulfilled:

(1) The surgeon or anesthesiologist giving the anesthetic must be well informed regarding the fundamentals and principles of spinal anesthesia, e.g., thoroughly familiar with the technique and with the action of the anesthetic solution being used.

(2) The patient must be a good surgical risk.

(3) Deep breathing and leg exercises, as well as frequent change of position should be instituted as soon as the patient returns from the operating room.

Spinal anesthesia is not necessarily the best method of anesthesia for poor risk cases; neither is it suited for the aged nor the very young. Before the surgeon decides to use spinal anesthesia in poor risk cases, he should take into consideration all factors involved and consult with someone well informed about anesthesia in general so that the possibility of another more suitable method of anesthesia would not be overlooked. Consultation with an internist would also be advisable in these questionable cases. However, it is true that an anesthesiologist, well informed about spinal anesthesia, can, in certain poor risk cases, use it to advantage over other types of anesthesia. This discussion of spinal anesthesia will be limited to two anesthetics: (1) Procaine, and (2) Pontocaine-Glucose. The techniques employed are (a) single dose spinal, and (b) continuous, intermittent, or multiple dose spinal.

There are many fundamentals and principles involved in inducing and safely carrying out spinal anesthesia, but the *most important fundamental is the relationship of the specific gravity of the anesthetic solution to the specific gravity of the spinal fluid.* If this one fundamental is not known, or is ignored, there can be no safety in spinal anesthesia. One should never use a spinal anesthetic unless it is known that the specific gravity of the anesthetic solution is definitely lighter (hypobarbic) or heavier (hyperbarbic) than the known variations of the specific gravity of the cerebrospinal fluid. Average sp. gr. of spinal fluid is 1.007, with variations ranging from sp. gr. 1.001 to sp. gr. 1.010. It is seldom that the sp. gr. is as light as 1.003.

Height of Anesthesia:

The height of the anesthesia cannot safely be regulated by forceful and rapid injection. Whenever anyone attempts to control the height of spinal anesthesia by forceful injection, he is using an undetermined factor and one which may prove extremely dangerous. *The height of anesthesia should be regulated by the following six factors:*

(1) The specific gravity of the anesthetic solution.

(2) Position of the patient during and after the injection (tilting of the table; raising or lowering the head of the table, as indicated).

(3) Dosage.

(4) Volume.

(5) Rate of injection.

(6) Site of the injection (least important).

Contraindications to the Use of Spinal Anesthesia:

(a) Advanced surgical shock or hemorrhage.

(b) Marked debility.

(c) Cardiac disease, moderate or advanced.

(d) Extremes of blood pressure, particularly hypotension.

(e) Limited vital capacity, particularly if expecting to use Trendelenburg position.

(f) Diseases of central nervous system.

(g) Highly nervous individuals and those afraid of spinal anesthesia.

(h) Sepsis.

(i) Infection of skin at site of injection.

(j) Minor surgical procedures.

(k) Poor risk cases, unless, after consultation, it is decided that the spinal anesthesia would be safer after all factors are considered.

*Read before the Seaboard Medical Association of Virginia and North Carolina, at Virginia Beach, Va., December 11-13, 1945.

†The opinions expressed in this article are those of the writer and are not to be construed as reflecting the views of the Navy Department.

Indications for Spinal Anesthesia:

Spinal anesthesia is indicated only in surgery below the diaphragm, such as:

(a) Surgical cases requiring considerable relaxation.

(b) Surgery below the diaphragm in the presence of the following: Pulmonary diseases, such as asthma, bronchitis, bronchiectasis, emphysema, and tuberculosis where inhalation anesthesia might be inadvisable; hepatic diseases; metabolic diseases, such as diabetes; and nephritis.

(c) Acute abdominal surgery, except in shock or hemorrhage (for example, ectopic pregnancy).

(d) Particularly indicated in operations on the stomach, intestines, gall-bladder and extra-hepatic bile ducts, mechanical intestinal obstructions, appendicitis, hernias, transurethral surgery, rectal surgery, major dislocations and major amputations of the lower extremities.

Complications During Anesthesia:

(a) *Respiratory Paralysis.—Respiratory paralysis is always due to too high anesthesia.* The anesthesia should not extend above the nipples in surgery of the upper abdomen and if proper care is taken, the height of the anesthesia can ordinarily be well controlled. Certainly complete respiratory paralysis should not occur if a careful technique is employed. The depth of the respirations should be frequently observed. In the event respirations are significantly diminished, oxygen in high concentrations should be administered, and if necessary artificial respirations instituted. Compression of the rebreathing bag will aid in increasing the depth of the respirations.

(b) *Fall of Blood Pressure.—Circulatory depression* may occur any time during the anesthesia, but, as a rule, it is manifested rather early. While there will be some cases developing marked hypotension, even when anesthesia is not high, *as a rule, marked hypotension is due to too high anesthesia. Circulatory depression is a most serious complication and is thus to be avoided.* As a prophylaxis against the development of hypotension, give ephedrine mgm. 50 about 5 to 10 minutes before the spinal is given. It is advisable to have neosynephrine m v to m vii ready so that it can be given upon the first sign of hypotension. Methedrine in doses of 20-30 mgm. is also useful in preventing hypotension and its action is prolonged. The blood pressure should be taken before the anesthetic is given and every five minutes during the operation. It is much easier to prevent hypotension than to treat it after its development, in view of which the anesthesiologist must be constantly alert to its development. However, if it does occur, then prompt action should be taken to combat it and oxygen given in high concentration. One should remember that ephedrine may occasionally cause cardiac irregularity and that the pulse may be slowed by neosynephrine.

(c) *Nausea and Vomiting.*—Nausea and vomiting may occasionally be due to the anesthetic agent but they are usually due to too high anesthesia or to hypotension. They also occur during operative procedures, particularly those of the upper abdomen. Oxygen in high concentration is helpful.

(d) *Bloody Spinal Fluid.*—Do not give a spinal anesthetic in a bloody spinal fluid. If unable to get a clear fluid after trying other sites, then use a different type of anesthesia.

(e) *Sensitivity.*—While sensitivity to the anesthetic agent has been reported, it certainly is of rare occurrence. It is probable that a large percentage of what has been reported as sensitivity was actually due to errors in technique.

(f) *Inadequate Anesthesia.*—Inadequate anesthesia may be due to an insufficient amount of the anesthetic agent or to an inadequate anesthesia for unusually long operations. It may also be due to an inadequate concentration of the anesthetic. The anesthetic solution must promptly reach all the nerve roots it is desired to block. *Diffusion* is greater with low spinal fluid pressure and therefore more profound anesthesia will result. The nerve roots near the site of the injection show the most intense and profound block, while those roots higher up and reached by weaker solutions have a shorter anesthesia of less depth.

(g) *Failures.*—If you have a failure of anesthesia, it is because the injection was not made into the subarachnoid space. Failures happen even though one may have obtained a free flow of spinal fluid, due to not holding the needle still while the injection was being made. A frequent cause of movement of the needle is made during the attachment of a syringe with a Luerlock. Other causes of failures are the use of long bevel needles, and to deteriorated solutions. Short bevel needles are safer and more efficient than the long bevel ones. The

anesthetic solution should always be checked for signs of deterioration before the injection.

Complications—Post-Operative:

Post-operative complications actually resulting from the anesthetic are rare.

(a) *Headaches.*—Headaches occur in a certain percentage of cases. Most of these might be termed psychological headaches, since the patients are usually warned that by raising their heads, a headache will result. If the patients are assured that they will do well, headaches seldom occur.

(b) *Nausea and Vomiting.*—These are rarely due to the anesthetic, but more often are due to the operation.

(c) *Meningismus.*—This is of extremely rare occurrence if a proper technique is carried out, but may occur in neurotic individuals or when a deteriorated solution is used.

(d) *Urinary Retention.*—We have found only a slightly higher incidence of urinary retention after spinal anesthesia than after general anesthesia for the same type of surgery, but some reliable authors have reported a much higher incidence.

(e) *Respiratory Complications.*—Respiratory complications are about the same after spinal anesthesia as after general anesthesia (possibly excepting ether), if deep breathing exercises and frequent change of position are not carried out. However, if deep breathing exercises and frequent change of position are promptly instituted after the patient returns from the operating room, then pulmonary complications are less after spinal anesthesia.

(f) *Injury to the Cord and Nerves.*—The cord terminates about the upper part of the second lumbar vertebra (except in children where it is usually lower) and there is a real danger of injury to the cord if the puncture is made high. If the injection is gently made and in the proper interspace, injury to the cord and nerves should be of extremely rare occurrence.

Pre-Operative Medication:

Patients to be given spinal anesthetics are entitled to sufficient pre-operative medication to dull their sensibilities, so they will not become frightened or panicky during the operation. Drowsiness is to be desired, but complete hypnosis is not advisable.

A satisfactory plan of pre-operative medication is as follows: Phenobarbital grs. iss at bedtime; seconal (or other suitable hypnotic) grs. iss two hours before, with morphia gr. 1/6-¼ and atropin sulph. gr. 1/150 one hour before the scheduled operation. These doses should be varied to meet the individual requirements.

Techniques:

Detailed techniques will not be discussed, as each surgeon should develop the details most suitable to himself after he has studied spinal anesthesia and observed anesthesiologists well trained in spinal anesthesia. There are, however, a few details which it might be well to emphasize.

Spinal anesthesia as discussed in this article will apply to the use of spinal anesthesia as used in a general hospital with nurse-anesthetists, and where the surgeons give the anesthetics and accept full responsibility for the anesthesias. Therefore, there will be a somewhat limited use of spinal anesthesia, as well as a restriction of the number of anesthetic agents employed.

(a) *Anesthetic Agents.*—By limiting the anesthetic agent to procaine and to pontocaine-glucose, the anesthetic agents are hyperbarbic (heavier than the spinal fluid) and therefore the technique in regard to the specific gravity will follow the same principles, although more care will have to be exercised with the pontocaine-glucose solution as it is much heavier. *By gravity these hyperbarbic solutions, particularly pontocaine-glucose, can be caused to flow to most any desired position within the spinal canal.* Therefore, if the head of the table is low for any particular length of time when using these hyperbarbic solutions, the anesthesia will extend too high.

It is customary to dissolve the procaine crystals in spinal fluid and to mix pontocaine solution 1 per cent with an equal part of glucose 10 per cent. If pontocaine crystals are used, they are dissolved in saline, mgm. 10 to each c.c., and the resulting solution mixed with an equal part of glucose 10 per cent. These two anesthetic agents satisfactorily meet the requirements in the majority of cases when spinal anesthesia is indicated.

(b) *Dosage.*—While procaine is often used in much larger doses, it probably is advisable to limit its dosage to 150 mgm. when the single dose method of spinal anesthesia is employed. *Pontocaine solution as at present manufactured with a specific gravity of about 1.007 should not be used alone for spinal anesthesia because it is not necessarily either*

XUM

hypobarbic or hyperbarbic, and therefore would be too dangerous. Pontocaine should always be used with glucose. The glucose has no anesthetic properties and it is used to make certain that the solution will always be heavier than the spinal fluid. The dosage of pontocaine in the single dose technique should never exceed 20 mgm. and it seldom should exceed 16 mgm. *Whenever the operating time is to be prolonged, continuous spinal would be indicated instead of the single dose method.* The more the cerebrospinal fluid is displaced by volume of the anesthetic solution, the more extensive will be the area of anesthesia. The greater the dosage, the more profound will be the anesthesia, and the area of anesthesia will also be greater.

(c) *Specific gravity of the anesthetic solution and the position of the patient on the table as determined by tilting the table and by raising the head.*—When using these hyperbarbic anesthetic solutions, the head of the patient and cervical spines should be kept elevated while the anesthetic solution is being given, and when the patient is placed upon his back, the head, cervical and upper dorsal spines must be elevated until the anesthetic has become fixed in order that the anesthesia would not extend too high. In fact, it is advisable to keep the head of the patient elevated throughout the operation, particularly when using pontocaine-glucose. *Too high anesthesia with its resultant hypotension and respiratory paralysis should be prevented, with careful attention to details in regard to the specific gravity of the anesthetic solution.* Just as soon as the patient is placed upon his back, there must be constant testing of the skin until the desired height of anesthesia is reached. An Allis clamp is excellent for testing the skin anesthesia.

CONCLUSIONS

1. Spinal anesthesia is only indicated in surgery below the diaphragm.

2. Spinal anesthesia is perhaps the safest and best method of anesthesia in surgery below the diaphragm, especially that which requires considerable relaxation, provided the following requirements are fulfilled:

(a) The surgeon or anesthesiologist giving the anesthetic must be well informed regarding the fundamentals and principles of spinal anesthesia, e.g., thoroughly familiar with the technique and with the action of the anesthetic solution being used.

(b) The patient must be a good surgical risk.

(c) Deep breathing and leg exercises, as well as frequent change of position should be instituted as soon as the patient returns from the operating room.

3. Spinal anesthesia is not necessarily the best method of anesthesia for poor risk cases. The surgeon should consult with an anesthetist and with an internist before deciding to use spinal anesthesia in poor risk cases.

4. When the surgeon has to give the spinal anesthetic and has to accept responsibility for it, then the number of the patients given spinal anesthetics will be less and the number of anesthetic agents will be more restricted than would be the case when a trained physician is the anesthesiologist.

5. *Too high anesthesia,* with its resultant respiratory paralysis and hypotension, is a most serious complication but should be avoided by careful attention to details.

6. *Spinal anesthesia should not be used for minor surgical procedures.*

7. Respiratory complications are less after spinal anesthesia, provided deep breathing exercises and frequent change of position are promptly instituted as soon as the patient returns from the operating room.

8. Only anesthetic solutions which are definitely hypobarbic or hyperbarbic should be used for inducing spinal anesthesia.

9. *Whenever the operating time is to be prolonged, continuous spinal would be indicated instead of the single dose method.*

10. There are few hospitals of 200 or more beds where they can not afford to employ a physician trained in anesthesia, and surgeons in authority in these larger hospitals should make a plea that a physician-anesthesiologist be placed in charge of the Department of Anesthesia.

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Suite 505 Wainwright Building.

Doctor Estimates Three Out of Four People Have Athlete's Foot.

Dr. Jerome S. Peterson believes that three out of four persons have, or once had, athlete's foot, which is caused by tiny organisms called fungi.

The New York physician, writing in the current issue of *Hygeia,* the health magazine of the American Medical Association, says that these fungi follow the example of most germs and bacteria by liking heat and moisture. With the approach of summer, trouble begins for sufferers of athlete's foot. Dr. Peterson states:

"In a cold, dry place, the fungi wither away after a while, but when they are on feet which become overheated, and start perspiring, they flourish.

"The fungi usually are found in great hordes in public showers, gymnasiums and around the edges of swimming pools. Almost everyone has the fungi on his feet—yes, even people who have never had any symptom of athlete's foot.

"There are some cases where the infection isn't confined solely to the feet. The hands are the likely sites for this secondary infection, but occasionally the thighs and other parts of the body may be included.

"Athlete's foot fungi may be tiny, but they're remarkably resistant fellows, who have kept scientists guessing for about 25 years. No substance has been discovered which is guaranteed to cure every case of athlete's foot. The main drawback in this search is that it's not easy to discover a potion which will destroy the fungi without destroying the healthy foot tissue."

Nicotinic Acid Relieves Patients With Severe Headaches.

Two New York physicians, writing in the May 11 issue of *The Journal of the American Medical Association,* report that nicotinic acid is highly effective for the relief of headaches of a persistent nature, such as migraine or severe idiopathic headaches which stem from an unknown cause.

Joseph W. Goldzieher, M.D., and George L. Popkin, M.D., from the New York City Hospital, Welfare Island, say that of 100 consecutive patients with severe headaches who received injections of nicotinic acid, 75 were completely relieved.

The patients had 100 milligrams of nicotinic acid in a salt solution injected into their veins. This was the standard dosage. In the average case from 30 to 45 seconds elapsed before the patient was aware of any effects, the doctors write. Then there was a feeling of warmth or heat with an accompanying flush. "Within three or four minutes the patient, though not comfortable, became accustomed to the heat, which gradually subsided in about 15 minutes and usually disappeared in 20 minutes to a half hour."

Nicotinic acid is a nutritional factor of the vitamin B complex, used in the treatment of acute pellagra—a vitamin deficiency disease. It is known to produce a dilatation of the blood vessels with an increase of blood flow to the brain.

Nicotinic acid has also been known to relieve malarial headache and sinus headache.

XUM

MANAGEMENT OF ADENOMATOUS GOITERS*

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I propose to limit my discussion this afternoon to adenomatous goiters, toxic and non-toxic, as this is the predominant type that occurs in this section of the State. One thing we must remember is that adenomas of the thyroid gland are true neoplastic growths. There is no more reason for the questioning of the neoplastic nature of adenomatous nodules in the thyroid gland than there is to question the neoplastic nature of adenomatous nodules in the prostate gland, intestinal mucosa, uterus, kidney and mammary gland. The layman and the medical profession are very apprehensive about a small growth in the breast tissue but this does not hold true with the same type of growth in the thyroid gland.

Adenomatous goiters are primarily a surgical problem. Medical treatment is of no avail and irradiation or thiouracil are indicated only in inoperable malignancy or after removal of the malignant tumor.

Adenomatous goiters are dangerous for the following reasons:

1. About 60 to 70 per cent of them become toxic. This toxicity develops insidiously and is less likely to undergo spontaneous remission than any other type of goiter.

2. About 2 to 3 per cent of adenomatous goiters prove to be malignant.

3. Many of the goiters that do not become toxic or malignant gradually increase in size and extend into the thorax, producing dangerous pressure symptoms on the trachea, esophagus and blood vessel.

4. Adenomatous goiters may cause cardiac damage without producing typical symptoms of hyperthyroidism.

5. A thyroid crisis may be precipitated by other disturbances, such as an infection, miscarriage, surgery, and further complicate the picture. When a crisis occurs in a delicate type of individual, a profound state of prostration may exist rather than a hyperactivity and an excitable stage. If a patient has two existing surgical conditions, the goiter should receive precedence except in an extreme emergency.

*Read before the Southwestern Virginia Medical Society at Radford, Va., October 4, 1945.

If we consider all growths in the thyroid glands primary neoplastic growths, just as we find in any other organ in the body such as the breast, the surgical removal of all adenomatous goiters appears justified. Occasionally we may allow a small thyroid nodule to remain under observation. This is satisfactory in the majority of cases, but when patients are 40 years of age or more it is less satisfactory since the presence of earlier malignant changes cannot be excluded in any nodular goiter. If all non-toxic or toxic adenomatous goiters were removed surgically, the incidence of malignancy would be almost entirely eliminated. In addition, adenomas of the thyroid gland are subject to many types of complications, such as degenerative changes, strangulation, hemorrhages, infarction, necrosis and formation of cystic areas and atrophy-calcification. They are also subject to all kinds of inflammatory changes.

Adenomatous goiters may be divided into several classifications from the pathological standpoint, but this makes very little difference to the clinician since the findings in a nodular goiter are well known. You may find a discrete rounded tumor in either lobe or isthmus, or you may find multiple nodules throughout the entire gland, producing great distortion. Adenomatous goiters are usually found in older patients than those with hyperplasia of the gland.

There is a tendency to advise patients who have a growth in the thyroid to let it alone until it begins to give them trouble. This advice means a great responsibility on the doctor because there is still no single reliable sign, symptom, or test to aid in the diagnosis of toxicity of the thyroid gland. A reliable objective test has been sought without avail for many years. Far too much reliance is still placed upon the findings of an increased basal metabolic rate. The accuracy of this determination depends largely upon the tranquility and the cooperation of the patient, those factors which are too often overlooked in the evaluation of the results. However, under proper conditions it is the most reliable single diagnostic aid. Persistent tachycardia, an enlarged thyroid gland (which is sometimes difficult to pal-

pate), weight loss, nervousness, emotional instability, fatigue, intolerance to heat and muscular weakness are indications of toxicity. Increased appetite with loss of weight is the usual picture but in a few cases they may have increase in weight due to the excessive intake of food. In a patient who has a persistent high pulse pressure, the diagnosis of hyperthyroidism should be considered. The progress of the disease in the adenomatous goiter is very insidious and the toxic changes may be present several years before this condition is recognized. Iodine medication is very dangerous in non-toxic adenomatous goiters, because severe toxic changes may be induced. Patients should never receive iodine unless they are being prepared for surgery.

Mention should be made of the menopausal symptoms which are often accompanied by toxic change in adenomatous goiters. I do not mean amenorrhea alone which is a common symptom, but hot flashes with amenorrhea occurring in women of the menopausal age. The nervous symptoms of menopause are so closely similar to those of hyperthyroidism that the case may be confused. It has been my experience that non-toxic goiters become toxic more often between the ages of 40 and 50. It is often difficult to determine whether the menopause is causing the disturbance or if it is caused from the toxicity of the adenoma of the thyroid gland. I believe, in cases of this type, the diagnostic course of Lugol's solution is extremely helpful. They should not be given any other type of medication during this trial period. Shute reported recently several cases of hyperthyroidism treated by estrogenic hormone and there are many such examples in the literature. It may be that the normal estrogenic blood level keeps a potentially toxic thyroid under control, but at menopause when the estrogenic blood level drops the symptoms of hyperthyroidism become more apparent. I certainly feel that any patient in the menopausal age, who is being prepared for surgery, should receive estrogenic hormone along with Lugol's solution.

I believe that all adenomatous goiters, toxic or non-toxic, should be removed surgically. It is necessary, in my opinion, to prepare all patients for surgery regardless of toxicity. The majority of the thyroid surgeons feel that it is unnecessary to prepare a non-toxic adenoma for surgery, but since this is so difficult to determine I believe it is safer to give all patients a preparatory treatment. I see no reason why taking iodine for a short period of 10 days would be of any disadvantage to the patient, but I do believe that a prolonged use of iodine in a non-toxic thyroid may be dangerous. The patients are usually given 10 drops of Lugol's solution in grape juice three times a day after meals, for 10 days. They are also given B complex during this time and phenobarbital, as necessary, for sedation. After treatment for 10 days or two weeks, they are admitted to the hospital and basal metabolic rate, routine laboratory and hippuric acid liver function tests are done. The patient should be prepared mentally as well as physically. If the patient is too apprehensive about the operation, try to make it a point to have him visit a patient who has recently been operated on and is making a good recovery. Psychological preparation is probably just as important as medical preparation. I usually explain to the patient how I expect to do the operation, under what type of anesthesia, and do not attempt to "steal" the goiter. The night before the operation the patient is given a thousand milligrams of vitamin C and 3 grains of nembutal. One hour before the operation the patient is given morphine, grains 1/4, or morphine, grains 1/6, with atropine, grains 1/150, and nembutal, grains 3. When they undergo an operation with this type of medication, they are usually quiet and not apprehensive. The type of anesthesia used in all the cases reported in this series is local anesthesia supplemented by pentothal sodium intravenously. Bilateral cervical plexus block is also included in the local anesthesia. After the patients leave the operating room they are usually awake, but quiet and not apprehensive or excited. An attempt is made to have them start drinking water freely, immediately after leaving the operating room or as early as possible thereafter. The next day after the operation, the patient is allowed to have a soft diet and bath room privileges, if desired.

I would like to report 98 consecutive thyroidectomies done from 1941 to 1945 with no deaths. The pathological report was given by Dr. J. Hamilton Scherer of Richmond, Virginia. As you will note from the table, in this series there were 57 cases of toxic and non-toxic adenomata. We have two cases in this series reported as papillary cyst adenomas but a suggestion was made that an early malignancy might be present. Another interesting factor is that only three cases were male. The percentage of

XUM

Hashimoto's disease is rather large. All of the patients received Lugol's solution in their preparation of surgery. Thiouracil was used in three cases during preparation with good results. One case had a rather severe toxic reaction from thiouracil and this was discontinued. Thiouracil may be very beneficial in preparing an extremely toxic adenomatous goiter for surgery, along with Lugol's solution. Thiouracil has no place in the treatment of the adenomatous type of goiter.

98 CONSECUTIVE THYROIDECTOMIES FROM 1941-1945
PATHOLOGICAL REPORT BY DR. J. HAMILTON SCHERER, RICHMOND, VIRGINIA

		Male	Female	Deaths
Non-toxic adenoma	27	1	26	0
Toxic adenoma	32	1	31	0
Colloid goiter	16	1	15	0
Exophthalmic goiter	3	0	3	0
Papillary-cyst adenoma	2	0	2	0
Fetal adenoma	2	0	2	0
Toxic hyperplasia	12	0	12	0
Hashimoto's disease	4	0	4	0
(struma lymphomatosa)	—	—	—	—
	98	3	95	0

Myxedema may occur as a complication following thyroidectomy. In a nodular type of goiter you will occasionally have to remove the entire gland in order to get all of the adenomatous tissue, because if all of the adenomatous tissue is not removed you will certainly have a recurrence of the growth. There were three such cases in the series of 98 cases reported above. Myxedema can be handled very satisfactorily with thyroid extract. Post-operative myxedema may disappear spontaneously or it may require indefinite treatment, and a patient needs to be cautioned to take thyroid extract indefinitely. After patients become familiar with the symptoms of myxedema, such as swelling of the upper eyelids, stiffness of the hands and general weakness, they can handle the case themselves. All cases of thyroidectomy should be under observation for several months or probably a year, following the operation. The operation alone is only an incident in the treatment of this type of disease.

SUMMARY

1. Ninety-eight consecutive thyroidectomies are reported with no deaths.
2. Discussion was limited to toxic and non-toxic adenomatcus goiters. All toxic and non-toxic goiters are surgical unless some very serious complication accompanies the conditions.
3. All patients are prepared for surgery, both toxic and non-toxic, because it is difficult at times to be certain that you are not dealing with a low-grade toxic thyroid.
4. Estrogenic hormone is used in preparing patients for surgery when in the menopausal age.
5. Local anesthesia, supplemented with 2½ per cent pentothal sodium intravenously, makes a very desirable type of anesthesia.
6. Average age of patient: 40. Average age of toxic adenoma: 43.
7. Complications: Tetany, 3 cases. Recovered after two or three months. Recurrent laryngeal nerve injury, 1 case. Hoarseness after six months. Myxedema (mild), 10 cases.

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German Measles in Pregnancy Has Effect on Unborn Infant.

Women who suffer with German measles during pregnancy risk giving birth to a malformed child, according to an editorial appearing in the March 2 issue of *The Journal of the American Medical Association.*

German measles, known as rubella, is mild and less serious than measles. However, a study made in Australia between 1937 and 1942, when rubella was widely prevalent, shows the "occurrence of grave eye, ear, cardiac and other congenital defects in the children born during these years of mothers who had rubella during the early months of pregnancy."

One investigator cited in the editorial "estimated that practically all children of mothers who have rubella in the first two months of pregnancy and 50 per cent of those having it in the third month will be defective."

In conclusion the editorial says: "There can be no question that special efforts must be made to prevent rubella in early pregnancy. At this time all contacts with persons suffering from rubella must be avoided, especially by the woman who has not had the disease. Perhaps specific means of prevention will become available."

Find Early Sulfadiazine Treatment Effective for Dysentery.

Early sulfadiazine treatment of shiga dysentery produces a prompt cessation of symptoms, according to Major Lucian A. Smith, Medical Corps, Army of the United States.

"By formal definition bacillary dysentery, or shiga dysentery, is an acute infectious disease of the lower bowel caused by the Shigella group of organisms and manifested by fever, cramps, nausea, vomiting and frequent stools containing mucus, pus and blood," the author wrote in the January 5 issue of *The Journal of the American Medical Association.*

Major Smith based his conclusion on 87 cases of shiga dysentery seen in an army station hospital in New Guinea between May 1944 and March 1945. Fourteen in this group were treated with bed rest and a prepared diet; 20 were treated with sulfaguanidine, a compound of the sulfonamide group; 34 with sulfadiazine, and 19 with a combination of the two sulfonamides. The latter two groups had the most severe symptoms.

The author found that "if sulfadiazine treatment could be begun within 12 to 24 hours after onset of symptoms it was usually possible to anticipate objectively complete clearing of the lesions and restoration of a normal bowel within three to ten days."

Bacillary dysentery occurs all over the world although it is prevalent in the warm latitudes. It was the second most important war disease in World War I.

In dysentery the bacilli multiply in the intestines and produce lesions by direct contact of the organisms and their toxins with the intestinal walls. The deeper tissues and blood are seldom invaded and blood cultures are usually sterile. Therefore it has been necessary to use an instrument called the proctosigmoidoscope by which the observer can inspect the lower 10 to 12 inches of the bowel in the patient. The author wrote that "in 90 per cent of instances we feel it is possible to make an early positive diagnosis of shiga dysentery by means of the proctosigmoidoscope." It is extremely important that an early diagnosis is made before ulcerative lesions have a chance to form.

XUM

THE SKIN TEST AS A SUGGESTED AID IN THE DIAGNOSIS OF SALMONELLA SUIPESTIFER—A CASE REPORT

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and
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Various manifestations of *Salmonella suipestifer* infection have been described in the literature. The second case from world literature was reported from the Medical College of Virginia by Dr. Frederick W. Shaw in 1925. This case was diagnosed and studied only at postmortem. The organism was cultured from the blood while the patient was living, but it was not definitely identified until after death. The patient, a colored man, exhibited typhoid-like symptoms on admission and died twenty-four hours later.[1] In 1938, Clifton and Werner summed up the information on these infections and reported 36 cases in childhood.[2] The clinical manifestations vary and may be those of gastro-enteritis, respiratory tract infections, osteomyelitis, specific abscesses and septicemia.[3] This case had pulmonary symptoms with septicemia. It is reported because a skin test was used to show the tissue immunity reaction, and it is hoped that such a test might be developed for diagnostic purposes. In an extensive review of the literature we could find no reference to any type of skin test having been used for this organism.

CASE REPORT

A. H., a colored male aged two years, was admitted 1-17-44. He had "influenza" one month previously and since that time had had a continuous upper respiratory tract infection. On 1-14-44 this infection flared up into a fever, non-productive cough, rhinorrhea, and anorexia. There was no diarrhea, constipation, or convulsions. About twelve hours before admission his respirations became very rapid and he was quite restless.

Past history, including family history, was essentially negative except for a diarrhea of unknown etiology, at nine months of age. He had been fed breast milk for six weeks, a formula of evaporated milk until six months of age, and since then he has been on whole cow's milk from a city dairy. He has had cod liver oil and orange juice since six weeks of age. There was no history of exposure to any contagious disease.

Physical examination revealed a temperature of 106 degrees, pulse 120, and respiration 68. A pale colored child, fairly well developed and nourished, was lying quietly in bed in no acute distress. He appeared listless and was breathing rapidly, with a flaring of the alae nasi. There was a mucoid nasal discharge and crusting in both nasal passages. The pharynx was injected and the tonsils were prominent. Lymph nodes were not enlarged.

On auscultation the lungs showed questionable fine moist rales in both upper lobes. There was no apparent abnormality in percussion of the lungs.

The liver was felt two finger-breadths below the costal margin.

The reflexes were normal.

Chest x-ray at the time of admission showed a band-like density in the lower right periphery and there were numerous nodular densities at both hila. These were conglomerate with a suggestion of primary tuberculosis and compatible with bronchopneumonia.

Complete blood count on admission showed white blood cells 6,850, polymorphonuclear cells 57 per cent, eosinophiles 2 per cent, lymphocytes 41 per cent, monocytes 0, red blood cells 3,200,000, and hemoglobin 58 per cent. The urine was negative on all examinations. Tuberculin 1:500 was negative. Routine agglutinations including typhoid, paratyphoid, Brucella and tularemia were negative.

The temperature the first four days ranged from 104 to 106 degrees except for one drop to 100 degrees on the second day. It fell by lysis on the fourth and fifth day and was normal on the sixth hospital day. The next morning there was a rise to 106 degrees and sulfadiazine was instituted. It had not been used previously because of the leukopenia. The temperature fell to normal before two doses had been given. It was discontinued on the eighth hospital day.

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Dr. Morris is now in the Service and Dr. Irons is located at Greenville, North Carolina.

The pulse rate remained rapid until the second week when it gradually dropped to normal. Respirations followed the temperature curve.

Symptomatic therapy was instituted as follows: Hartmann's solution subcutaneously, 1 per cent ephedrine nose drops, 20 per cent Karo throat irrigations and two whole blood transfusions. At 10:30 P. M. on the night of admission patient became dyspneic and oxygen was administered for 24 hours.

Organisms found in the blood cultures done on 1-18-44 and 1-24-44 were identified by carbohydrate reactions and specific agglutination tests as Salmonella suipestifer. These were found in the stools on 2-11-44 although two subsequent cultures were negative. Urine cultures were negative on two occasions.

A skin test was done on the eleventh hospital day (the fourteenth day of the disease). The antigen used for this test was that of a saline suspension of the strain of Salmonella suipestifer previously isolated and identified from the blood taken on 1-18-44 from the patient.* It was standardized to the density of the bacterial suspension corresponding to the No. 3 tube of the McFarland Nephelometer, autoclaved at 15 pounds for fifteen minutes and preserved with .5 per cent phenol. Two dilutions were used, the first on the eleventh hospital day was 1:150, and the second on the fourteenth hospital day was 1:10,000. Both tests were read in twenty-four hours and showed a wheal 1 x ½ centimeters. As controls, two normal children were given identical tests each time. None of the normal children showed any reaction.

The child made a slow but steady recovery. X-rays taken on admission and every three or four days later showed some shifting of the densities with slow improvement and eleven days after admission the lung was nearly clear. The patient was seen in the clinic on 4-7-44 and was apparently in good physical condition.

He was readmitted to the hospital on September 5, 1945, and was diagnosed as scarlet fever. He made an uneventful recovery. A chest plate taken at that time showed the same few densities as seen on plate made nine months previously.

*Identified by Department of Bacteriology, Medical College of Virginia, and checked by Dr. Seligman, Beth Israel Hospital, New York.

DISCUSSION

It is conceivable that this disease is common where it is known that 10 per cent of all pigs have positive cultures from the gastrointestinal tract.[4] These animals contract the disease under adverse conditions, which presupposes that humans are also carriers. The source of infection in epidemics has been traced to unpasteurized milk, ham, pork, sausage, and crab meat.[3] However, sporadic cases are much more common than epidemic cases.[5] The source of infection in our case could not be determined definitely, but the history of poor environmental conditions is suggestive as a source. Gajzago and Göttche observed that the disease was more common in children and when entire families were affected that the youngest member of the family contracted the disease more easily.[5] He attributed this to the lower resistance of children.

The symptoms of the infection vary widely, depending on the area infected. Reported cases include the uncomplicated bacteremias, brain abscesses and other abscesses; multiple bony involvement with osteomyelitis, arthritis, and spondylitis; infections complicating surgical operations; endocarditis, cystitis, rare pyelitis, gastrointestinal tract involvement and pulmonary involvement.[6] Our case showed some pulmonary symptoms but since sputum cultures were not done we could not make a definite statement as to the extent of the pathology in the lungs.

This organism is becoming more widespread, being found in many more cases than are being reported and we feel that the clinician's attention will be called to the condition more frequently. A simplified skin test for diagnosis in localities where there is a lack of bacteriological facilities would be helpful.

The treatment of the case was symptomatic. It is very probable that sulfonamides had no effect.

SUMMARY

A case of suipestifer septicemia is presented with a new skin test. It is hoped that this skin test can be developed further for diagnostic use.

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Proposed Medical Research Center.

Major General Norman T. Kirk, Army Surgeon General, announced proposed plans for an Army Medical Research and Graduate Training Center at a press preview of Medical Department's exhibit booked July 1-5 for American Medical Association's 95th annual session in San Francisco.

The proposed Army center would be located at Forest Glen, Maryland. It is the site of National Park College which was converted to a convalescent hospital during the war to care for Walter Reed General Hospital patients. When the project is approved it will take approximately 12 years to construct.

With an eye toward post-war responsibilities of the Army Medical Department, such a center will consolidate Army research activities. Information gleaned in all Army laboratories now scattered throughout the United States and Panama would become available at the center. And, rare maladies encountered would be subjected to expert civilian and military scientific study as patients suffering such diseases would be transferred to a 1,000 bed general hospital which will be established in the center for clinical observation.

General Kirk has expressed a desire to have the general hospital and Army Institute of Pathology erected first with other buildings to follow. Other proposed installations are an Army Institute of Research Medicine and Dentistry, Army Institute of Research Surgery and Radiation Therapy, Army School of Global Medicine and an administration building.

Primarily devoted to basic research and graduate training, the Army is not in a position at this time to estimate how many laboratories would be discontinued in the field and placed in the proposed center. Further, many laboratories are strategically located with reference to study of certain endemic diseases, the permanent location of specialized troops such as Armored Forces and Chemical Warfare and with regard to accessibility to civilian medical equipment and laboratories.

It is certain that Army Institute of Pathology would be located at the center as soon as possible. World renowned, the pathology institute comprises Department of Pathology, American Registry of Pathology, Army Medical Illustration Service and Army Medical Museum. Founded during the Civil War, Army Institute of Pathology, formerly the Army Medical Museum, occupied its present quarters in 1887. Its 19th Century offices are now totally inadequate.

General Kirk explained that careful study had been given the present Army Medical Center grounds at Walter Reed General Hospital. Not more than two of the proposed units could be constructed in space immediately available.

Forest Glen, which is near District of Columbia and adjacent to Rock Creek Park, a national site, is large enough to accommodate the proposed center in the present and future. All research installations could be housed there and living quarters maintained for military scientists and caretaking personnel and civilian medical scientists who might be employed under United States Civil Service ratings. Further, garrison life would be possible with a parade ground and other military requisites available.

General Kirk emphasized that the proposed center was still in the planning stage and had not received War Department approval.

XUM

PRIMARY VIRUS MASTITIS FROM MUMPS*

CLAUDE MARSHALL LEE, M.D.,
Charlottesville, Virginia.

It is recognized that the report of a case of primary mastitis from the virus of mumps is open to justifiable skepticism both because there is no known method by which such a diagnosis may be proven, and because an exhaustive search of the literature, including all available in the Surgeon General's Library, has failed to disclose any previous report of such a case. However, the evidence, though necessarily "circumstantial", is so strong in the case under consideration that the diagnosis appears to be justified.

It will be recalled that in classical mumps, after an incubation period of from 14 to 21 days, the onset is characterized by painful swelling in one or both parotid glands, fever, ranging from 101 F. to 104 F., a *slow* pulse (50-60 min.), malaise, chilliness, anorexia and headache. There may be a prodromal period of 24 to 48 hours before the onset of frank parotitis and extreme elevation of temperature, which, once established, usually begins to subside after the second day, returning gradually to normal over a period of seven or eight days in uncomplicated cases. Relapses after 10 to 15 days are said to occur in about 10 per cent of cases, and the usual custom is to isolate for 3 weeks after onset of symptoms.

The common complications are meningo-encephalitis (20-23 per cent), and orchitis (1 per cent before puberty and 18-25 per cent after puberty), and the less common ones of deafness, pancreatitis, nephritis, oorphoritis, and *mastitis* are described as occurring occasionally. It is of course a matter of common knowledge that the submaxillary glands may, not infrequently, be involved, either independently or coincidentally with the parotids. The blood picture, though not diagnostic, may be helpful, with a moderate increase in white blood cells and a relative and absolute lymphocytosis.

CASE REPORT

The patient, Mrs. C. R. L., was a married woman of 38, the mother of 6 children, the youngest of whom was a nursing infant of two months. The patient had never had mumps, but within a period of 5 or 6 weeks prior to onset of her illness all of the children except the infant had mumps. The exact date of onset in the last child was not known, but was thought to be within two weeks of the onset of the mother's illness. The family lived in a small farm house near Free Union, Virginia, and daily contact was close, affording abundant exposure.

On June 8, 1945, the patient became ill with acute painful tender swelling of the right breast, followed in 24 hours by a similar swelling of the left breast, malaise and fever. For a day prior to the swelling of breasts there was difficulty in swallowing, but no pain in the jaws, no tenderness or swelling, even in the most minute degree in the parotid or submaxillary glands. Symptoms increased in severity for the first 2 days and then began to subside. The pain and swelling of the breasts had completely subsided 5 days later. However, on the fifth day she developed increased fever and a severe headache, with malaise, nausea and vomiting. Temperature was 103.2 F., pulse 80. There were no objective signs of meningeal irritation, such as stiffness of the neck or Kernig's sign. The patient was mentally clear; there was no petechial rash, and, except for headache, fever, ringing in ears, nausea and vomiting, no other signs of acute meningo-encephalitis. The abdomen was negative, with no tenderness over the ovaries and no muscle spasm.

The headache was relieved by pantopon, gr. ⅓, by hypodermic. It did not stop entirely, however, and persisted along with anorexia, nausea, weakness, vertigo and tinnitus for a period of 10 days, subsiding gradually. The patient used the bed rest position more or less constantly. No other treatment was administered except pantopon—by hypodermic and dissolved under the tongue. On June 25 her temperature was 97.8 and pulse 88. Breasts were now almost completely involuted, flabby and empty. Only a small amount of clear fluid could be expressed from each nipple. All deep reflexes present but sluggish. Pupils reacted nor-

*Read before the Albemarle County Medical Society January 3, 1946.

XUM

mally. Eye grounds normal. Ear drums negative, but there was complaint of some deafness.

After the tenth day of headache and associated symptoms, and 15 days after onset of the acute non-suppurative mastitis, the patient went on to a complete recovery. At no time during the entire illness did she have any involvement of either parotid or submaxillary glands.

DISCUSSION

The question arises at once as to whether or not this was a case of primary virus mastitis from mumps. Primary involvement of the testis in mumps[1] has been reported and mastitis as a complication of classical mumps is well recognized, but I have been unable to find a recorded case of primary involvement of the mammary glands.

In considering the question, the close histological and physiological relationship between the mammary glands and the salivary glands makes one wonder why such primary involvement might not occur nearly as frequently as it does in the submaxillary glands, since the virus obviously has an affinity for this type of glandular tissue. Little is known of the histopathology, since the disease is so rarely fatal, and available information is largely limited to studies of the salivary glands of monkeys in which the disease has been artificially produced.

In the present case, no other basis for the symptoms was demonstrated. The exposure had been adequate and the onset and course of the disease were similar in nearly every respect to a classical case of mumps complicated by mild meningoencephalitis. The only noteworthy disparity lay in the fact that none of the salivary glands was affected and both mammary glands were. Moreover, once the latter had become so involved, the pathological changes subsided in a manner identical to that in which the salivary glands return to normal in ordinary mumps. Although the parotid glands do not atrophy after mumps, it is known that when mastitis occurs as a complication, atrophy of the mammary parenchyma sometimes follows. It would be interesting to see, in the event that the patient becomes pregnant again, whether or not she is able to nurse the baby as she has her others.

If the diagnosis is accepted, the next speculation arises as to how the disease was transmitted. Most probably transmission was via the respiratory passages or mouth and stomach, as is believed to be the case in ordinary mumps. It is of interest, however, that the nursing infant did not contract the disease. It is well known that young infants, up to the sixth or eighth month, appear to have a high degree of immunity. It might, therefore, be reasoned that this infant though heavily exposed and carrying the virus in its mouth, without contracting the disease, may have transmitted it directly while nursing through the ostia of the mammary ducts.

Although confirmation of the diagnosis might happily have been derived from a sort of "complication in reverse" with later involvement of the salivary glands, this did not occur. The case is therefore reported on the basis of evidence at hand, since I know of no way in which the diagnosis might have been conclusively established.

1. Cecil, Text-Book of Medicine—6th Ed., P. 48—Muckenfuss.

205 East High Street.

"Courage and Devotion Beyond the Call of Duty."

Through the cooperation of Mead Johnson & Company, $34,000 in War Bonds are being offered to physician-artists (both in civilian and in military service) for art works best illustrating the above title.

This contest is open to members of the American Physicians Art Association and will be judged in June 1947 at the Atlantic City Session of the American Medical Association. For full details, write Dr. F. H. Redewill, Secretary, Flood Building, San Francisco, Cal., or Mead Johnson & Co., Evansville 21, Indiana.

SPONTANEOUS PASSAGE OF OPEN SAFETY PIN FROM ESOPHAGUS INTO STOMACH WITH POINT OF PIN DIRECTED DOWNWARD—REPORT OF CASE

PORTER P. VINSON, M.D.*
Richmond, Virginia.

Open safety pins are frequently swallowed by children and become impacted in the esophagus in many instances, requiring removal through an esophagoscope.

When an open safety pin of average size and moderate spread between the point and keeper is swallowed, the foreign body may lodge at any level in the esophagus, with the point and keeper pointed upward and the spring directed downward. A small pin may pass into the esophagus, with its point directed downward, or a large one may be swallowed, pass into the stomach and be regurgitated into the esophagus with its point directed downward. An open safety pin of any size that is lodged in the esophagus, with its point directed upward, may pass into the stomach spontaneously or may be purposefully pushed into the stomach during esophagoscopic examination.

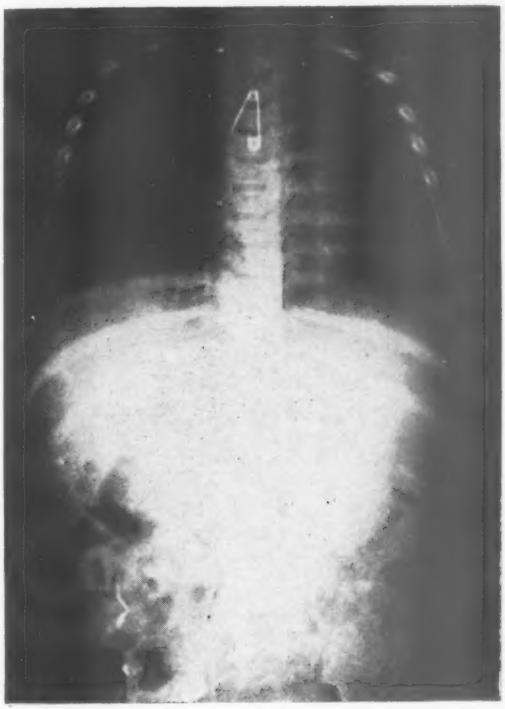

Fig. 1.—Original roentgenogram showing foreign body in middle third of esophagus, with point of pin directed downward.

When the point of the pin is directed downward, esophagoscopic removal of the foreign body is accomplished with ease by grasping the spring and closing the pin as it is drawn into the lumen of the esophagoscope. There is no justification for attempting to push a pin in this position into the stomach during esophagoscopic examination. Spontaneous passage of an open safety pin from the esophagus into the stomach is seldom observed when the point of the pin is directed downward, and for that reason the following case is reported:

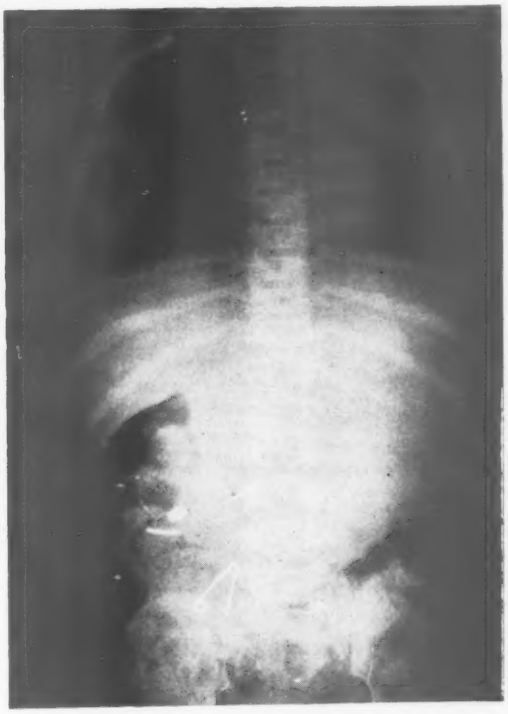

Fig. 2.—Roentgenogram immediately prior to proposed esophagoscopy, showing foreign body in intestine.

CASE REPORT.—A baby girl 7 months of age swallowed an open safety pin about 3:00 P. M., September 24, 1945. She had a vomiting spell soon

*Medical College of Virginia.

after the pin was ingested, and a roentgenogram made at 7:00 P. M. on the same day revealed the foreign body in the middle third of the esophagus, with the point of the pin directed downward (Fig. 1). The sequence of events and the position of the pin suggested that it had been swallowed and then regurgitated into the esophagus during the spell of vomiting.

When the child was seen the following morning preparation was made for esophagoscopic examination because it was believed that the foreign body would certainly remain in the esophagus until instrumental removal was accomplished. However, routine roentgenoscopic examination was made immediately prior to the proposed esophagoscopy, and the pin was shown to be in the intestine (Fig. 2). The foreign body passed spontaneously in the stool the following day (Fig. 3).

Fig. 3.—The foreign body after spontaneous passage.

Floral Eponym (40)

GILIBERTIA

JEAN EMMANUEL GILIBERT, 1741-1814

Gilibert was born at Lyon in 1741. Called to Poland by Stanislaus upon the recommendation of Haller, he created the botanical garden of Grodno and was professor of natural history at Wilna. He returned to Lyons in 1783 as physician to the Hôtel-Dieu, and was mayor of the city in 1792. His final post was professor of natural history at the *Ecole centrale du département du Rhône.* He was the author of many books on botany and medicine. Osler has the following note in his *Bibliotheca Secunda*; "Gilibert was a famous botanist, ardent naturalist and anti-polypharmacist. The genus Gilibertia is called after him." Gilibert's son Stanislaus was also a physician. He graduated in medicine at Montpellier and was the author of a work on the lymphatic system in health and disease.

Gilibertia is a small genus of the family Araliaceae, consisting of tropical American shrubs. They are not known in cultivation. The name is frequently, but incorrectly, used by gardeners for Trevesia.

TENSION PNEUMOTHORAX FROM RUPTURE OF ESOPHAGUS REPORT OF CASE

W. E. PEMBLETON, M.D.,
Richmond, Virginia.

Tension pneumothorax following trauma is ordinarily caused either by interstitial emphysema with diffusion of air along the blood vessels into the mediastinum and pleural cavities or by rupture of the visceral pleura.[1] Leakage of air from the esophagus is a rare occurrence,[2] but should be considered when tension pneumothorax develops after trauma. Although I saw the patient only at postmortem examination, study of the following case presents a cause of tension pneumothorax which, so far as I have been able to ascertain, has not been reported previously in medical literature.

REPORT OF CASE

L. C., a white male aged 33 years, was brought to the hospital at 4:30 P. M., on January 8, 1945, approximately a half hour after the weapon carrier in which he was riding had overturned and had pinned him beneath it. On admission to the hospital the patient complained of abdominal pain and dyspnea, and he was in shock, with pallor, cyanosis, and perspiration.

The pulse was thready, with a rate of 120 per minute. The blood pressure was estimated at 80 systolic and 50 diastolic. Breath sounds were absent over the entire left side of the thorax. Other physical findings included tenderness over the ninth and tenth ribs in the left anterior axillary line and over the spinous process of the twelfth thoracic vertebra, an abrasion over the abdominal surface on the left side, and generalized abdominal tenderness and muscular spasm. The laboratory studies which were completed revealed an erythrocyte count of 4,250,000 and a leukocyte count of 18,600, with 64 segmented forms, 17 bands, and 19 lymphocytes. The hemoglobin was estimated at 70 per cent by the Tallqvist method.

Oxygen was administered continuously by nasal catheter; suction was instituted by the Wangensteen apparatus; and ½ grain morphine sulphate and ½ cc. tetanus toxoid were given. One thousand cc. each of plasma and 5 per cent glucose in normal saline were also administered, and the blood pressure rose to 108 systolic and 65 diastolic. However, the patient grew progressively worse; respiration became labored, with a rate of 44 per minute; cyanosis increased, and the pulse rate rose to 170 per minute. On physical examination, the heart was found to be displaced into the right side of the thorax. The patient was given an additional ¼ grain morphine sulfate and 1/150 grain atropine about four hours after admission. At 1:30 A. M. of the following day, nine hours after admission, he expired.

At autopsy, when the left pleural cavity was opened, air escaped with a hiss. Both lungs were collapsed, and there was early fibrinous exudate over their surfaces. The pleura was intact. The left pleural cavity contained approximately 500 cc. of slightly blood-tinged gastric contents, and the right pleural cavity contained approximately 200 cc. of thin blood-tinged fluid. A large tear in the esophagus, about ½ inch above the diaphragm, communicated with the left pleural cavity. The heart showed only scattered, faint, stippled hemorrhages. The abdominal cavity contained approximately 300 cc. of bloody fluid. Both ilio-psoas muscles were torn. There was retro-peritoneal hemorrhage, and the left diaphragm bulged inferiorly so that the stomach and the spleen were displaced to the right. There was a slight tear of the capsule of the liver. The transverse processes of the third and fourth lumbar vertebrae were fractured.

It would seem that in the unusual type of tension pneumothorax described above, recovery could have been achieved only by surgical closure of the rent in the esophagus.

201 West Franklin Street.

1. Hamman, Louis: Mediastinal Emphysema, *J.A.M.A.* **128**:1-6, (May 5) 1945.
2. *Ibid.*

XUM

PUBLIC RELATIONS AND MEDICAL CARE

The Council of the Medical Society of Virginia, meeting in Richmond, Wednesday, May 29th, in order to clarify and bring to the attention of the physicians of the State the need for a thorough understanding of the many problems facing the public and the medical profession in the field of medical service, adopted unanimously the following public relations policies and a Five Point Program:

Public Relations Policies of the Medical Society of Virginia

1. Maintain an office of public relations to serve the public and the medical profession.
2. Support a program of public relations embracing the following activities:
   - A. Meetings with component societies
   - B. Conferences with individual doctors
   - C. Forums—on timely subjects
   - D. Work with cohesive groups
   - E. Bulletins—of special importance
   - F. Press releases
   - G. Radio programs
   - H. Other items to the best interests of the medical profession in Virginia, and extension of medical service
3. Adopt Medical Society's Five Point Program.
4. Affect a united effort to extend medical service and hospitalization.
5. Advise public of medical service problems and the efforts of the medical profession to solve these problems.

Five Point Program

I. Inform the public.
   - A. What the medical profession
     1. Has done
     2. Is doing
     3. Hopes to do.
   - B. As to some of the problems of the medical profession in rendering medical care.
   - C. As to what the public can do to aid in a better medical service program.

II. A study and survey of matters pertaining to medical service in Virginia.
   - A. Study medical services available to indigents and medically indigent.
   - B. Study hospitalization available for indigents and others.
   - C. Assist in development of local health units, health centers (with proper facilities), and hospitals.

III. Study, sponsor and support proper legislation —local, state, and federal.
   - A. Exercise one's right of franchise and encourage others to vote.
   - B. Study existing legislation.
   - C. Consider proposed legislation and suggest desirable laws.
   - D. Support or oppose the enactment of legislation on the basis of its merits.

IV. Advise, endorse and assist in the extension of medical service.
   - A. Study of Virginia medical service plans.
   - B. Inform members of each component sociciety of
     1. Existing medical service plans in operation in Virginia.
     2. Consider any improvement and extension of medical service.
     3. Endorse and support and participate in medical service plans.

V. Stimulate and integrate medical thinking and support policies and objectives of the Medical Society.
   - A. Conduct discussion in component societies of policies and objectives.
   - B. Attack the problems in determined agreement over each objective adopted by the State Society.

HENRY S. JOHNSON, *Director,*
Public Relations and Medical Care,
Medical Society of Virginia.

PUBLIC HEALTH

I. C. RIGGIN, M.D.
State Health Commissioner of Virginia.

The report of the Bureau of Communicable Diseases of the State Department of Health for May, 1946, as compared with the same month in 1945, and for the period of January through May, 1946, compared with the same period in 1945, follows:

	May 1946	May 1945	Jan.-May 1946	Jan.-May 1945
Typhoid and Paratyphoid	4	8	28	23
Diarrhea and Dysentery	165	91	723	1,021
Measles	2,837	166	9,836	1,069
Scarlet Fever	233	287	1,746	2,301
Diphtheria	32	14	200	117
Poliomyelitis	2	2	8	14
Meningitis	17	23	132	143
Undulant Fever	6	1	19	9
Rocky Mountain Spotted Fever	6	5	8	8
Tularemia	3	4	29	17

INFANT MORTALITY IN THE STATE IN 1945

There were 3,095 deaths of infants under one year in Virginia last year, of which 1,947 were white and 1,148 were colored. The infant death rate maintained its low wartime record in 1945. Although the total rate of 48.5 per 1,000 live births in 1945 was slightly higher than the rate (48.3) for the preceding year, it showed a 27 per cent reduction over the last prewar year (1941) when the rate was 66.8. The white rate (41.3) last year represented a 4 per cent decrease over the year 1944, while the colored rate (69.1) in 1945 showed an 8 per cent increase.

Among deaths of infants under one year, 1,799 occurred during the first month of life, giving a total neonatal rate of 28.2 per 1,000 live births. This represents a rate *decrease* of 4 per cent over 1944. During the most dangerous period of infant life (under one day) there were 805 deaths, with a rate of 12.6 in 1945, in comparison with a rate of 13.7 for the previous year. For the past few years, the increased proportions of medical attendance and hospitalization at birth are reflected in lowered mortality for very young infants.

Among the causes of death associated with early infancy, premature birth (the greatest cause of infant mortality) showed a reduction to 860 in 1945 from 977 in 1944, and deaths from injury at birth declined to 246 last year from 288 for the previous year. Deaths from congenital malformations, however, increased slightly in 1945 to 287 from 274 for the preceding year, and other diseases of early infancy rose to 317 from 307 in 1944.

During the past three decades the greatest reduction in infant mortality has been among infants one to eleven months of age. This was due, for the most part, to a reduction in mortality from the infections, respiratory, and gastrointestinal diseases. Contrary to the usual trend, however, last year in the State deaths among infants one to eleven months of age showed an *increase* in death rate. The rate of 18.9 per 1,000 live births in 1944 rose to 20.3 last year, a gain of 7 per cent.

Deaths from the respiratory diseases among infants under one year showed an increase to 454 deaths in 1945 from 421 for the previous year, and the gastrointestinal causes to 335 from 268 in 1944. On the other hand, deaths from the infectious diseases declined to 213 from 262 during the preceding year.

In spite of a spectacular decline in infant deaths during the past 30 years in the State, there is still an appalling loss of life during infancy. Much can be done, however, to bring infant mortality to the irreducible minimum.

XUM

COUNCIL
MEDICAL SOCIETY OF VIRGINIA
Special Meeting

A special meeting of the Council was held at the Society's office in Richmond on May 29th, with the president, Dr. Julian L. Rawls, presiding. Others present were: Dr. W. L. Powell, president-elect; Dr. H. B. Mulholland, past president; Drs. J. D. Hagood and W. L. Peple, vice-presidents; Drs. R. B. Bowles, C. L. Harrell, Carrington Williams, J. L. Hamner, W. A. Porter, J. R. Gorman, Alex. F. Robertson, Jr., and J. E. Knight, councilors; Dr. M. P. Rucker, editor; Dr. I. C. Riggin, State Health Commissioner; Dr. J. M. Emmett, chairman, Committee on Public Relations and Medical Service; Mr. Henry W. Johnson, director, Public Relations and Medical Service; and Dr. H. H. Earp of the Veterans Administration.

Dr. Rawls stated that the purpose of the meeting was to discuss plans for providing medical care for beneficiaries of the Veterans Administration. This was one of the subjects discussed at a conference in Philadelphia recently, and he felt Virginia doctors would like to do what they can for the care of veterans suffering from service connected disabilities. He introduced Dr. Earp, representing the Veterans Administration, that he might tell how this service is handled in other states.

Dr. Earp said that Michigan and New Jersey handled these cases through Medical Service plans already in operation in those states, and they had added seven to eight per cent to the schedule of fees adopted by their societies in order to cover the cost of clerical and paper work. The Medical Service organization pays the doctors and bills the administration for the service. In Kansas the State Medical Society takes over the work, with the addition of necessary stenographic and clerical services. West Virginia adopted a modification of the Kansas plan and has the doctor bill the administration direct. He said it is the wish of his organization to have each State draw up its schedule of fees and submit them to the administration for approval. In answer to a question, he stated the case must be a service connected disability and the doctor must have authorization. If found by their rating man not to be service connected, the doctor will be paid for emergency attention and, if the patient can travel, he should be sent to the nearest Veterans hospital.

Dr. Rawls said that the question had been raised by some doctors as to the large amount of paper work that would be required. It was explained that doctors in making examinations would have to fill in only that part of the forms which applied to their individual work. North Carolina has only one medical service plan and works through that organization, but, as Virginia has several of these plans, it was thought better for them to adopt the West Virginia plan.

Being asked if there is delay in payment of bills, Dr. Gorman said he had done work for the VA in Roanoke and he felt he could answer that question by saying if bills are rendered promptly on the first of the month, payment will be made promptly. It was also asked if veterans could enter veterans hospitals for non-service disabilities. The reply was that veterans could be treated in these hospitals in such case if they signed forms stating they are medically indigent.

Following the discussion, motion was made that a committee be appointed to agree on what they think fair fees for service, submit the schedule to the Veterans Administration for their approval, and then send to members of the Society, asking them to sign and return cards enclosed showing their willingness to enter into the arrangement. Dr. Earp said he hoped the fees adopted by the Society would be adopted for all doctors in the State and not only for those who sign up. In the discussion, statement was made that the Council assumed no financial obligation in regard to the plan, and Dr. Harrell said he felt the Committee should be composed of at least five members of the Society. The motion was then adopted.

Dr. Rawls said the Mid-Atlantic States Regional Conference on Medical Service and Public Relations was held recently in Philadelphia, at which there were four representatives from Virginia. Each state was asked to contribute $150.00 a year for the clerical help and material necessary in sending out literature with regard to the problems confronting the medical profession. Dr. Mulholland moved that the appropriation of $150.00 be paid. This was seconded and carried.

Dr. H. H. Trout, chairman, Procurement and Assignment Service for Virginia, had sent the secretary a letter from the Service in Washington, in which she was requested to ask that his records in that work be transferred to the State Society office. Dr. Rawls said that the secretary had informed him there was no space in which to store these, as Dr. Trout had said it would make a package about 3 x 5 feet, and wished to know what should be done. Dr. Mulholland moved that the Society accept these files as soon as space is available. Seconded and carried.

Dr. Williams said he had been instructed by the Richmond Academy of Medicine to present to the Council a schedule of revised fees they had adopted for use by the Richmond Medical Service Association, as some of the Academy members were not satisfied with the schedule and, as authorized, he suggested that the Council accept the document, which was rather long, and submit it to the Medical Service Association. Dr. Mulholland objected to the Council accepting this, and Dr. Rucker asked why it might not go to the Association direct from the Academy. Motion was then adopted that the Council feels that this document should be sent direct from the Richmond Academy of Medicine to the Virginia Medical Service Association. Seconded and carried.

Recess was then taken for lunch.

XUM

Resuming business, Dr. Rawls introduced Mr. Johnson, the newly appointed Director of Public Relations, and explained that since he had come to the Society, he had been sent to states which have been outstanding in medical service and public relations that he might get their viewpoint.

Mr. Johnson spoke of his visits to the several states, laying special stress on the work in New York where he also attended the State meeting. There they take the press into their confidence, have a room for the press at their meetings and copies of addresses in their hands before they are presented to the Society.

As far as the Wagner-Murray-Dingell Bill is concerned, he felt if it did not go through at this Congress, it will come back in another guise as there seems a desire to do something for medical care at a lower rate.

Mr. Johnson presented tentative policies with respect to Public Relations and the Five-Point Program for the Medical Society of Virginia which had been approved by the Public Relations and Medical Service Committee on the previous evening. These follows:

PUBLIC RELATIONS POLICIES

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4. Affect a united effort to extend medical service and hospitalization.
5. Advise public of medical service problems and the efforts of the medical profession to solve these problems.

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I. Inform the Public.
   - A. What the medical profession
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   - B. As to some of the problems of the medical profession in rendering medical care.
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   - A. Study medical services available to indigents and medically indigent.
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   - B. Study existing legislation.
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   - B. Inform members of each component society
     1. Existing medical service plans in operation in Virginia.
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V. Stimulate and Integrate Medical Thinking and Support Policies and Objectives of the Medical Society.
   - A. Conduct discussion in component societies of policies and objectives.
   - B. Attack the problems in determined agreement over each objective adopted by the State Society.

This had been presented to the Public Relations and Medical Service Committee the previous evening and the chairman, Dr. Emmett, said they felt the plan offers ideas to start the work. He said the Committee further felt that, in order to do his best work, Mr. Johnson would need separate offices and the set-up should be commensurate with the Society's income, but he understood offices could not be secured in the present building. He should also have necessary secretarial aid, and the Committee hoped the Council will add to the already established budget an amount sufficient that Mr. Johnson's department might function as they expect it to. He stated they did not expect an amount comparable with that in some of the larger states with which they had conferred, but he hoped the Council would authorize an additional $4,000.00 (though it may not require that much) to secure the physical equipment and for operating expenses in starting the work.

After discussion, motion was made and carried that a sum be added to the appropriation already provided for the office of Public Relations and Medical Service, sufficient for the office to be set up and function subject to the discretion of the Committee on Public Relations and Medical Service and the President. Dr. Rawls then appointed a committee composed of Dr. Carrington Williams, chairman, and Drs. Rucker and Riggin to help Mr. Johnson to select the proper location and get established in his office.

At this time, Dr. Mulholland moved the adoption of the Five Point Program as suggested by Mr. Johnson. This was seconded by Dr. Harrell, with the addition that it be published in the MONTHLY, and be made a press

release, following its appearance in the journal. Carried.

Dr. Rawls said that at the Committee meeting the previous evening, one of the subjects mentioned was a bill introduced in the U. S. Senate by Senator Taft and he asked Dr. Riggin to tell the Council of this.

Dr. Riggin said that Senator Taft disagreed with the Wagner-Murray-Dingell Bill and he, Senators Smith and Ball had offered a substitute bill which he believes is a good one and much better than the Wagner-Murray-Dingell Bill. This calls for the appropriation of $200,000,000 for the fiscal year ending June 30, 1947, and for each of the four succeeding years, to be administered by the States for medical service for families and individuals with low income, the states to contribute in proportion to the amount allotted each. He felt this is the best medical legislation to come out of Congress and the medical profession should get back of this bill one hundred per cent, as some medical legislation is going to be put over. He also suggested that the Council present this before the county societies.

There being no other business, Dr. Rawls said he would like to appoint the following committee to prepare a schedule of fees for the care of veterans with service connected disabilities, this to be presented to the Veterans Administration for approval: Dr. J. M. Emmett, chairman; Drs. H. B. Mulholland, J. R. Gorman, George A. Duncan, Alex. F. Robertson, Jr., and Mr. Johnson as secretary.

Adjournment followed.

AGNES V. EDWARDS,
Secretary.

Approved.
JULIAN RAWLS,
President.
June 8, 1946.

WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY OF VIRGINIA

President—MRS. P. M. CHICHESTER, Richmond
President-Elect—MRS. J. E. HAMNER, Petersburg
Recording Secretary—MRS. NATHAN SCHUMAN, Alexandria
Corresponding Secretary—MRS. L. C. BRAWNER, Richmond
Treasurer—MRS. REUBEN F. SIMMS, Richmond

Change of Address.

Mrs. P. M. Chichester and son have joined Dr. Chichester in Richmond. Their present address is 821 West Franklin Street, Richmond 20.

Northern Neck Auxiliary.

Under the leadership of Mrs. Paul Pearson, immediate past president and chairman of organization, an auxiliary to the Northern Neck Medical Society was organized on May 23rd.

The meeting was an interesting and enthusiastic one. There were nine women present. Other physicians' wives have expressed their interest and promised support of the work undertaken.

A message of congratulations and welcome was sent by the State President of the Auxiliary. The following officers were elected: President, Mrs. Paul Pearson; vice-presidents, Mrs. B. H. B. Hubbard and Mrs. E. R. Moorman; secretary, Mrs. Lee S. Liggan; treasurer, Mrs. P. E. Lilly; historian, Mrs. Robert Booker; publicity chairman, Mrs. V. L. Litsinger; Hygeia, Mrs. Moorman; and program and health, Mrs. Pearson.

Arlington Auxiliary Organized.

The first meeting was held on Thursday, June 6th, at the Washington Golf and Country Club. We had as our guests Mrs. P. M. Chichester and Mrs. Clyde West of Alexandria. Mrs. Chichester explained the functions of an Auxiliary, after which officers were elected: President, Mrs. Albert J. Orlosky; president-elect, Mrs. J. H. Walton; vice-president, Mrs. Richard Sutton; recording secretary, Mrs. George Stuart; corresponding secretary, Mrs. Robert W. Lee; treasurer, Mrs. Jerome Cope; historian, Mrs. J. R. McGriff; and parliamentarian, Mrs. W. C. Welburn, all of Arlington.

The Advisory Council, appointed by the President of the County Society, includes Dr. Raymond Hutchinson, Dr. George Stuart, and Dr. J. R. McGriff.

NANCY C. ORLOSKY (MRS. ALBERT J.)

Richmond Auxiliary.

Dr. Arthur B. Gathright, Jr., Acting Director of the Cancer Prevention Clinic at the Medical College of Virginia, was the guest speaker at the March luncheon meeting of the Auxiliary to the Richmond Academy of Medicine. His subject was "Cancer Prevention Clinics". After discussing cancer in general, he traced briefly the history of the early diagnosis clinics in the United States and the or-

XUM

ganization of the Cancer Prevention Clinic at the Medical College of Virginia for medically indigent patients. He pointed out that the function of the Cancer Prevention Clinic is purely diagnostic, the patients being referred back to the referring physician, or if they have no physician, and so desire, they are referred to the appropriate department of the Hospital or Out-Patient Clinic.

JULIA R. PASTORE (MRS. P. N.)

Norfolk Auxiliary.

The Woman's Auxiliary to the Norfolk County Medical Society met May 28th at the home of the president, Mrs. C. M. McCoy. The slate of officers was presented by Mrs. Southgate Leigh, Jr., chairman of the nominating committee, as follows: Mrs. Charles H. Lupton, president; Mrs. K. W. Howard, president-elect; Mrs. J. R. St. George, Mrs. M. F. Brock, and Mrs. N. C. Salley, vice-presidents; Mrs. T. N. Spessard, recording secretary, and Mrs. P. B. Parsons, assistant; Mrs. Mallory S. Andrews, treasurer, and Mrs. M. S. Harrington, assistant; Mrs. W. L. Taliaferro, corresponding secretary, and Mrs. Ben Steingold, assistant; Mrs. James W. Anderson, historian; and Mrs. T. Elmore Jones, parliamentarian. The election will take place when the Auxiliary resumes activity in the Fall.

The Auxiliary voted a contribution of $25.00 to the new Mental Hygiene Clinic, to be spent for medical books. The contribution is from the fund for the doctors' gift. The balance will be spent for such a gift that the doctors may need or wish at such time as a need is felt.

It was announced that the meeting of the Medical Society of Virginia and the Auxiliary will be held October 14-16 at the Cavalier, Virginia Beach, and the Southern Medical Association will meet in Miami in November.

Tea was served following the meeting.

CLARA P. BROCK (MRS. M. F.)
Chairman, Press and Publicity.

BOOK ANNOUNCEMENTS

Cornell Conferences on Therapy. Edited by Harry Gold, M. D., Managing Editor; David P. Barr, M.D.; McKeen Cattell, M.D.; Eugene F. DuBois, M.D.; and Charles H. Wheeler, M.D. Volume One. New York. The MacMillan Company. 1946. xix-322 pages. Cloth. Price $3.25.

In 1937 the departments of medicine and pharmacology of Cornell University Medical School began a series of conferences, the purpose of which was to develop an interest in rational therapeutics and to enrich therapeutic practice by weaving the science of pharmacology into the art of treatment. As participants in the conferences members of every department of the medical college and hospital, students and visitors were invited. From the beginning this venture was an immediate success, many of the conferences having been published in the journal of the American Medical Association and the New York State Journal of Medicine.

The conduct in which the conferences are conducted is very informal and this book depicts very faithfully this atmosphere. It contains the kind of information that the average practitioner will welcome.

In the present volume is discussed such topics as Use and Abuse of Bed Rest, Hypnotics and Sedatives, Treatment of Heart Failure, Digitalis and Digitoxin, the Use of the Mercurial Diuretics, Treatment of Poisoning, and other topics of equal general interest. The reviewer cannot recommend too highly to physicians generally this excellent series of conferences.

H. B. HAAG.

Modern Management in Clinical Medicine. By F. KENNETH ALBRECHT, M.D., S.A. Surgeon, U. S. Public Health Service; Kansas State Tuberculosis Consultant; Formerly Clinical Director, U. S. Marine Hospital, Baltimore, Md. Baltimore. The Williams & Wilkins Company. 1946. ix-1238 pages. Illustrated. Cloth. Price $10.00.

This is an interesting volume which should serve the American doctor as an excellent refresher course in the clinical management of the patient. It is essentially modern and complete in the newer developments of medical practice; especially pertinent is an evaluation of the Kenny treatment; geriatrics; arthritis; allergy; and infectious diseases of post-war importance.

The author is to be commended for the brevity and clarity of the presentation. This book is especially recommended for the general practitioner who wishes a workable and extremely modern review of all phases of medicine.

LOUIS KOLIPINSKI, M.D.

XUM

SHOULD WE CHANGE OUR PRESENT STANDARD ON INFANT VIABILITY?*

COMMITTEE ON MATERNAL HEALTH
MEDICAL SOCIETY OF VIRGINIA

The birth of a premature infant invariably arouses interest and invites speculation as to what constitutes the lower limit of viability. Periodically, one encounters newspaper articles giving the impression that the particular infant is the smallest on record. The subject should be of special interest to those doing obstetrics since upon the accoucher commonly falls the responsibility for the immediate postnatal care for the survival of these infants. Various criteria are used to determine whether a foetus is viable. On the basis of the duration of pregnancy, a foetus that has remained in utero 26 to 28 weeks is generally said to be viable. In terms of body length, this corresponds to about 35 to 36 cm. Another standard is set by law, which varies among states, but usually requires birth and death certificates for an infant when the duration of gestation is five months or more. Sixteen states and the District of Columbia have other legal limits varying from that of Maryland (any recognizable product of conception) to those of Washington and Indiana (seven months or more). A point which should be obvious is that such criteria do not make survival impossible for infants who fail to measure up to them.

It is accepted that the prognosis for survival of an infant varies with its weight. Those weighing less than 1,000 grams (2 pounds, 3 ounces) do not have a very good outlook, yet a survey of the literature shows that at least 54 such cases are on record. The smallest surviving infant had a minimum recorded weight of 420 grams. The smallest of three such infants born at the University of Michigan Hospital weighed 705 grams (1 pound, 9 ounces).

One often encounters the contention that the prospects for satisfactory mental and physical development of very small premature infants do not justify the prolonged and tedious care which they require. It has been quite definitely shown by Hess, Mohr and Bartelme that, excluding cases with birth injuries, premature infants show development comparable to that of normal infants. Physical growth in early years tends to lag somewhat behind that of term infants.

The great amount of special care and equipment necessary for a premature infant generally involves considerable expense. Are they worth it? If we use for comparison the care of patients afflicted with tuberculosis or malignant disease in which the outlook is often poor indeed, then the answer must be in the affirmative.

To designate a given weight, or the lower limit of viability, can have no particular virtue except for statistical purposes. It can promote the belief that no infant weighing less than such a standard can survive and, therefore, does not merit detailed attention. If there must be a standard, let it be based on recorded survivals. It is suggested that 1,000 grams (2 pounds, 3 ounces) would be a reasonable weight limit.

The number of recorded infants weighing less than 1,000 grams who have survived is not great, yet there are enough to show that every infant, no matter how premature, deserves full attention.

*Excerpts from a report by Doctor R. L. Haas, Ann Arbor, Michigan, from the Department of Obstetrics and Gynecology, University of Michigan Hospital. *American Journal of Obstetrics and Gynecology*, October, 1945.

Wyeth Makes Methionine Available.

Through arrangements made with U. S. Industrial Chemicals, Inc., New York, Wyeth Incorporated has been the first pharmaceutical firm in the country to make synthetic dl-methionine available to the medical profession in sufficient quantity for experimental clinical purposes. Production has still not reached the point where larger than investigational quantities can be offered through regular drug channels, but this point is not far off.

The pharmacological evidence which first established the specific value of methionine in liver damage (fatty infiltration, cirrhosis and necrosis) due to dietary, toxic and injury factors was the work of many scientists, both in America and in England. Prominent among these has been the research staff of the Wyeth Institute of Applied Biochemistry, in Philadelphia.

EDITORIAL

The Proposed National Health Act of 1946

WITH the many bills relating to national medical care and services which have been introduced in the Congress during the past several months, it is almost impossible for one to be familiar with all their details, the subjects covered, or the far reaching effects if all or even some of the proposed legislation were enacted into law.

In May, 1946, Senate Bill 2143 was introduced into Congress by Senator Taft (for himself, Mr. Smith and Mr. Ball). This proposed legislation differs in many respects from other legislation introduced relating to medical care.

Senate Bill 2143 proposes that the many health activities undertaken and carried on by the various departments, bureaus, and divisions of the federal government be coordinated into a single independent agency of the executive branch of the government. This agency would be known as "The National Health Agency". It is further proposed that the agency be headed by an administrator who shall be a Doctor of Medicine with certain qualifications.

This legislation authorizes the appropriation of $200,000,000 by the Federal Government for each year of a five year period beginning with the fiscal year ending June 30, 1947. These funds are to be expended by the State in providing general health, hospital and medical services for individuals of low income. The allotment of funds is to be made after a State Plan has been submitted and approved by the Surgeon General of the United States Public Health Service. A similar provision is made for the allocation of funds for dental service, the amounts being $8,000,000 for the year ending June 30, 1947, $12,000,000 for the fiscal year ending June 30, 1948, $16,000,000 for the fiscal year ending June 30, 1949, and $20,000,000 each for the fiscal years ending June 30, 1950 and June 30, 1951.

It is worthy of note that following approval of the State plans submitted to the Surgeon General, the administration of the program and expenditure of funds are entirely under State and local governmental administrative control. A condition to receive allotment of funds from the Federal Government under this legislation, requires a survey of all health activities within the State with particular attention being paid to the medical care provided for the lower income groups. In general, the use of these funds requires that the State and its governmental subdivisions must participate to the extent of at least twice the amount of Federal funds allocated. In other words, State and local funds must amount to at least 66⅔ cents of each dollar expended.

The Federal funds would be derived from the general funds of the Federal Treasury and not from compulsory taxation for these specific purposes. Funds are provided also for dental and neuropsychiatric research. State plans, as submitted, must include provisions for medical and dental examination of all school children. These examinations would be made without charge but treatment provided only for those unable to pay. Encouragement for voluntary health, medical and hospital insurance plans is given by reason of the fact that the State may make payments of premiums to such organizations in behalf of those unable to pay the whole cost of this insurance. In a word, this legislation proposes an allotment of Federal funds to the States for general health, medical, and hospital services for those unable to pay for the cost of such services in whole or in part.

The administration of the plans rests solely within the States. This proposed legislation does not endeavor to provide overall medical service and hospitalization in all

XUM

its aspects for all the people but does provide that the States shall administer general health, medical and hospital services for those unable to secure it for themselves. It seems this is a sane and logical approach to the question.

Every physician should give careful thought and study to this proposed legislation and draw his own conclusions as to whether or not the best interests of the American people will be served by the enactment of this bill, rather than through legislation which would attempt to provide so-called free medical and hospital service for all the people.

I. C. RIGGIN.

In the Balance

MEDICINE in America is facing the greatest crisis in its history. It is on trial for its very existence and the judges are not those of a court of justice, but the Congress of the United States. Congressmen are admittedly out to give the people what they want (or what they think they want). Powerful pressure groups are attempting to mold public opinion with skilfully concocted half-truths and misstatements. If anyone doubts this, let him read the testimony of the witnesses in favor of the Wagner-Murray-Dingell bill. Their testimony follows the same pattern and their "facts" evidently have the same source. Eventually the side with the best public relations will win.

Several State Medical Societies have employed well-known firms of business advisers to survey the situation and map out a future course. These experts have advised various things, but they all agree that the most potent force in establishing good public relations is a satisfied customer, and conversely a dissatisfied customer is ruinous. Sometimes it is hard to find out why a patient is dissatisfied. Not infrequently, when a doctor has done a particularly good job the patient is disgruntled, and quite frequently the reverse is true. What the doctor sells is service, and a service the quality of which is particularly hard to measure. Often the thoughtless remark of another doctor determines the patient's idea of the kind of service he has received.

Then, too, patients are prone to become confused about medical matters. They get the directions that you so carefully give them all mixed up, and what you have told them about the nature and prognosis of their disease is not recognizable when the patient repeats it a day or two later. Your editor has two hard and fast rules: (1) never to make a positive diagnosis of early pregnancy, and (2) never to tell a woman that she cannot get pregnant; and yet scarcely a month goes by without his being accused of breaking both rules. If the patient becomes so mixed up when he is talking to his own doctor, what can one expect when he is talking to some other doctor? Dr. Osler used to say, "Never believe what a patient says about another doctor." It is a good rule to keep constantly in mind. When a patient censures Dr. A to Dr. B, it is just a matter of time before he will be finding fault with Dr. B to Dr. C. It is small comfort to Dr. A or Dr. B to know that his tale is greatly exaggerated, if, indeed, there be any truth in it at all.

Organized Medicine is urging that local medical societies get the A. M. A.'s Ten Point Program into operation as soon as possible. "The most urgent need in putting the Ten Point Program into action is increased enrolment in prepayment Medical Care Plans." Along with this obligation of Medical Societies is the duty of individual physicians to see that there are no dissatisfied patients—either his own or his neighbor's.

SOCIETIES

The Northern Neck Medical Society

Held its regular meeting on May the 23rd, with a good attendance, including several visitors. At the business session, delegates and alternates were elected to the Virginia Beach meeting of the State Society. Officers of the Society are: President, Dr. G. Blight Harrison, Fredericksburg; vice-presidents, Dr. C. Y. Griffith, Machodoc, and Dr. R. E. Booker, Lottsburg; and secretary-treasurer, Dr. Lee S. Liggan, Irvington.

The Amelia County Medical Society

Held its annual meeting on May the 20th, at which time the following officers were elected for the ensuing year: President, Dr. James T. O'Neal, Amelia; vice-president, Dr. G. A. Arhart, Amelia; and secretary-treasurer, Dr. James L. Hamner (re-elected), Mannboro. Delegate and alternate to the State meeting were also elected at this time.

Tazewell County Medical Society.

Officers for this Society for 1946 are: President, Dr. A. D. Parson, Richlands; vice-president, Dr. Mary Elizabeth Johnston, Tazewell; and secretary-treasurer, Dr. J. A. Robinson, Richlands.

The Wise County Medical Society

Met at Norton on May 9th and the thirty doctors present were entertained at a steak banquet by Drs. C. L. Harshbarger and his staff of the Norton General Hospital. Delegate and alternate were elected to the State meeting in October. Dr. J. A. Abercrombie, Richlands, presented a most scholarly and comprehensive paper on "Head Injuries". Dr. Frank Smith, Councilor of the Ninth District, spoke of his early retirement from the State Board of Medical Examiners and made suggestions as to his successor. Drs. J. J. Porter and James Williams, Richlands, who have just been released from the Navy, spoke of their interesting work and experiences while in the Service. Drs. Ernie J. Benko, Norton, H. S. Silliman, Salem, and A. H. Bond, Norton, were elected to membership.

Dr. J. D. Culbertson is president of this Society and Dr. T. J. Tudor, secretary-treasurer.

NEWS

Have You Made Your Reservations?

We hope you are planning to attend the Annual Meeting of the Medical Society of Virginia at The Cavalier, Virginia Beach, October 14-16, and that you have already made your reservations. However, if you have overlooked this, write at once to The Cavalier as all reservations are being handled direct with them. As soon as this hotel is filled, you will be placed in one of the other hotels, conveniently located.

From all signs, this meeting should be the best ever held. The program is being prepared at this time and promises to be of unusual interest. Reservations have already been made for thirty-five technical exhibits and scientific exhibits are coming in also.

October at Virginia Beach is a delightful time of the year—not too hot and not too cold! A few days' relaxation will perk you up for the long winter ahead—so come on and make your reservations at once!

News Notes, Medical College of Virginia.

Major faculty promotions and new appointments, some made during the session 1945-46, and others effective July 1, 1946, are given below:

Dr. T. Neill Barnett from assistant professor of medicine to associate professor of clinical medicine.

Dr. Nathan Bloom from assistant professor of medicine to associate professor of medicine.

Dr. Douglas G. Chapman from associate in medicine to assistant professor of clinical medicine.

Dr. Marshall P. Gordon, Jr., from associate in urology to assistant professor of urology.

Dr. Erling S. Hegre from assistant professor of anatomy to associate professor of anatomy.

Dr. Guy W. Horsley from assistant professor of surgery to associate professor of surgery.

Dr. Roscoe D. Hughes from assistant professor of biology to professor of biology.

Dr. William R. Jordan from associate in medicine to assistant professor of clinical medicine.

Dr. Karl L. Kaufman from associate professor of

XUM

pharmacy to professor of pharmacy.

Dr. Paul S. Larson from research associate in pharmacology to associate professor of research pharmacology.

Dr. R. Campbell Manson from instructor in dermatology and syphilology to assistant professor of clinical dermatology and syphilology.

Dr. Allen Pepple from instructor in dermatology and syphilology to assistant professor of clinical dermatology and syphilology.

Dr. Benjamin W. Rawles, Jr., from associate in surgery to assistant professor of surgery.

Dr. Edward S. Ray from associate in medicine to assistant professor of medicine.

Dr. Leroy Smith from associate in surgery to assistant professor of surgery.

Dr. Maynard P. Smith from associate in otology, rhinology, and laryngology to assistant professor of otology, rhinology, and laryngology.

Dr. Lewis T. Stoneburner, Jr., from associate in medicine to assistant professor of clinical medicine.

Dr. George N. Thrift from associate in otology, rhinology, and laryngology to assistant professor of otology, rhinology, and laryngology.

Dr. Elam C. Toone, Jr., from associate in medicine to assistant professor of medicine.

Dr. James T. Tucker from assistant professor of orthopedic surgery to associate professor of orthopedic surgery.

Dr. Harry Walker from associate professor of medicine to professor of clinical medicine.

Dr. T. B. Washington from associate in urology to assistant professor of urology.

Dr. J. H. Weatherby from research associate in pharmacology to associate professor of research pharmacology.

Dr. B. R. Wellford from associate in otology, rhinology, and laryngology to assistant professor of otology, rhinology, and laryngology.

Dr. George Z. Williams from associate professor of pathology to professor of pathology.

Dr. J. Powell Williams from associate professor of medicine to professor of clinical medicine.

Dr. W. C. Winn from assistant professor of obstetrics to associate professor of obstetrics.

NEW APPOINTMENTS: Dr. Randall L. Thompson, associate professor of bacteriology and parasitology; Dr. William A. Summers, assistant professor of bacteriology and parasitology; Dr. Charles E. Troland, assistant professor of neurological surgery; Dr. Delbert V. Kechele, assistant professor of radiology; Miss Margaret Denniston, associate professor of nursing; Dr. Dwight C. Atkinson, assistant professor of exodontia and radiology; Dr. T. Wiley Hodges, assistant professor of orthopedic surgery.

Dr. Charles M. Caravati,

Richmond, having recently been released from Service, announces the reopening of his office at 807 West Franklin Street. Dr. James M. MacMillan, late Major, MC., AUS., and formerly of the Henry Ford Hospital Clinic, is associated with him, their practice being limited to internal medicine with particular attention to gastroenterology.

Dr. R. Campbell Manson,

Richmond, announces the removal of his office to 810 West Franklin Street, where he will limit his practice to dermatology and spyhilology. He has recently returned from overseas where he was with the 45th General Hospital and has been associated with Dr. T. W. Murrell.

Dr. William S. Sloan

Has opened offices in the Medical Arts Building, Petersburg, having recently returned from the Mayo Clinic where he took special work in internal medicine and medical specialties. He was in the Service for over five years, his last assignment being that of commanding officer of the 174th General Hospital in France. Dr. Sloan is a graduate of Vanderbilt Medical School, class of 1933.

Dr. O. N. Shelton,

Recently of Orange, is now with the Veterans Hospital in Tucson, Arizona, where he is chief of tuberculosis.

Dr. James Volpe, Jr.,

Formerly of Jonesville, is now located at Five Points Clinic, 439 First Avenue, Yuma, Arizona.

Released From Service.

Others, not previously listed, who have returned from the Service and resumed their practice are:

Dr. Henry L. Gardner, Jr., Franklin, with the Raiford Memorial Hospital.

Dr. A. S. Hurt, Richmond, has resumed the practice of pediatrics at 1004 West Franklin Street.

Dr. James T. O'Neal is back in Amelia.

Veterans Administration.

Three Virginia specialists have been named in a recently announced list of 15 leading physicians and

XUM

surgeons appointed consultants to the Richmond Branch Medical Service of the Veterans Administration.

"These consultants," said Dr. Daniel B. MacCallum, branch medical director, "will work directly with the branch office and are separate from the group of more than 100 consultants now assisting in VA hospitals in the branch area, which includes Virginia, West Virginia, North Carolina, Maryland, and the District of Columbia."

Designated tuberculosis consultant is Dr. Dean B. Cole, of the Medical College of Virginia faculty, who is one of the few internists active in the American Association of Thoracic Surgeons.

Dr. Robert Finley Gayle, MCV professor of neuropsychiatry, has been made senior VA consultant in neuropsychiatry. Dr. E. C. Drash, of the University of Virginia staff, was named in thoracic surgery.

Another Virginian, Dr. James Greear, member of the University of Virginia class of 1920, and professor of ophthalmology at Georgetown University, is ophthalmology consultant to the VA branch.

Others named, with their designation, are:

Dr. Ralph M. Caulk, radiation therapy, and Dr. George M. Wyatt, radiology, both of Washington; Dr. Paul G. Reque, dermatology and syphilology, and Dr. Barnes Woodhall, neurosurgery and special consultant in peripheral nerve registry, both of Duke University, Durham, N. C.; and Dr. Francis P. Parker, pathology, of Emory University, Atlanta, Ga.

Baltimore, Md., contributed the largest single group, including Dr. Benjamin M. Baker, Jr., internal medicine; Dr. George Eaton, orthopedic surgery; Dr. Alfred Lieberman, otolaryngology; Dr. John Herman Long, gynecology; Dr. W. Houston Toulson, urology; and Dr. I. Ridgeway Trimble, general surgery.

Selected through the Dean's Committee at each of the cooperating medical schools, the consultants will be called upon to assist in maintaining standards of practice in the VA hospitals and will help direct the training of residents. Each consultant is engaged on a fee basis, receiving $50 per day. Travel expenses also are provided when necessary.

In addition to the increase in consultants, VA reports steady progress in the appointment of full-time and part-time staff members. Forty-nine full-time and 11 part-time doctors were added during the week ending June 7. This was exclusive of consultants, attending physicians and residents.

Dr. MacCallum reported that the 14 per cent pay increase which Congress made effective July 1 has resulted in increased interest among doctors in the area. Salary scales which originally ranged from $3,640 to $9,800 will now range from $4,149 for the junior grade to the legal maximum of $10,000. However, he explained, doctors certified by an American Specialty Board will continue to receive an additional 25 per cent up to the limit of $11,000.

Doctors serving as medical members of rating boards will receive from $5,905 to $6,862. A number of positions in this category are still open.

State Department of Health Personnel Changes.

Dr. H. E. Jenkins, recently released from medical services with the Navy, has been appointed, as of June 1, 1946, Health Officer of the Southside Health District.

Dr. O. Cameron Kress, recently released from medical services with the Navy, has been appointed, as of June 16, 1946, Health Officer of Orange County Health District.

Dr. Charles G. Souder, previously with the U. S. Navy and latterly with the American Red Cross, has been appointed, as of July 16, 1946, Health Officer of Loudoun County Health District.

Dr. S. S. Shouse, formerly Health Officer of Page-Warren-Shenandoah Health District, and recently returned from medical services in the Navy, has been assigned, as of June 5, 1946, Health Officer of Charlotte County Health District.

Dr. J. C. Neale, Jr., Assistant Director of Local Health Services, was transferred from the Southeast District Office at Norfolk, Virginia, to the Central Office in Richmond, effective June 1, 1946.

Dr. J. G. McNiel, Health Officer of the Southside District, was appointed Assistant Director of Local Health Services in charge of the Southeast District in Norfolk effective June 1, 1946.

Dr. Hugh H. Trout, Sr.,

Roanoke, has been appointed by Governor Tuck as a member of the Board of Visitors of the University of Virginia for a term ending February 1950.

Dr. Johns Honored.

The honorary degree of doctor of laws was conferred on Dr. Frank S. Johns, Richmond, at the recent commencement exercises of Hampden-Sydney

XUM

College. He is chairman of the Board of Trustees of the College.

Dr. Plecker Resigns.

The resignation of Dr. W. A. Plecker, veteran registrar of vital statistics in the State Health Department, became effective June 30th. A successor has not been named. Dr. Plecker planned to retire several years ago but remained in his position during the war years because of the manpower shortage in the Department.

Married.

Dr. Joseph Stuart Staley and Miss Dorothy Maxine Thomas, both of Marion, May 31st.

Dr. George S. Grier,

After taking a special course in the Department of Pathology, Medical College of Virginia, has returned to Newport News where he is located at 130 26th Street. His practice will be limited to internal medicine.

Honor to Whom Honor Is Due.

In a program, sponsored by the Gretna Chamber of Commerce on June 1st, Dr. Oscar Lee Ramsey, one of Pittsylvania County's oldest and most beloved physicians who has practiced in the Gretna community for forty years, was presented with an automobile as a token of the esteem held for him as a physician by his many friends and patients. Dr. Ramsey is also active in the civic, religious and social life of his community.

Stuart Circle Hospital,

Richmond, announces the opening of a Laboratory of Bacteriology on June 1, 1946. This laboratory will be operated by Mr. Forrest Spindle who has had 22 years of service with the Virginia State Health Department Laboratory, as senior bacteriologist.

During World War I Mr. Spindle was bacteriologist in laboratory of the Walter Reed General Hospital, Washington, D. C. His experience covers many fields of acute and chronic infectious diseases.

Clinical Bacteriology has assumed an increasingly important roll since the development of such drugs as the sulfa group, penicillin and streptomycin.

Internationally Known Speakers at College of Surgeons Assembly in Detroit.

Mr. Hamilton Bailey of London, England, will visit Detroit in October to deliver an address at the Eleventh Assembly of the United States Chapter International College of Surgeons. His subject will be "Impending Death under Anesthesia".

Other eminent speakers and clinicians who will appear at the I. C. of S. clinics, and the Assembly to be held in Detroit's Masonic Temple, October 21-22-23, include:

Dr. Albert Jirasek of Prague, Dr. Francisco Grana of Lima, Peru, Dr. Lyon Appleby, Vancouver, B. C., Dr. Felipe Carranza of Buenos Aires, Dr. W. Wayne Babcock of Philadelphia, Dr. R. W. McNealy, Chicago, Dr. Wm. C. MacCarty, Rochester, Minn., Dr. Edwin L. Zander, New Orleans, Dr. Rudolph Nisson, New York, Dr. Max Thorek, Chicago, Dr. H. E. Billig, Los Angeles, Dr. S. W. Harrington, Rochester, Minn., and others.

Copy of program and detailed information, including housing arrangements, may be obtained by writing Dr. L. J. Gariepy, Secretary, 16401 Grand River Avenue, Detroit 27, Michigan.

Dr. Mundy Associated With Dr. Kyle.

Dr. Bernard H. Kyle, Lynchburg, announces that Dr. B. K. Mundy is now associated with him in the practice of orthopedic and fracture surgery with offices at 705 Church Street. Dr. Mundy is a graduate in medicine of the University of Virginia, class of 1939.

Dr. J. T. Ransone,

Who has recently completed five months' study at the Neurological Institute, New York, is locating in Newport News where he will limit his practice to neuropsychiatry. He was formerly in Salem.

American Association of the History of Medicine.

At the nineteenth annual meeting of this Association, held in Atlantic City, May 26-27, the following officers were elected: President, Dr. Richard H. Shryock, Philadelphia; vice-president, Dr. Henry R. Viets, Boston; secretary, Dr. Howard Dittrick, Cleveland; treasurer, Dr. Benjamin Spector, Boston; and editor, Dr. Henry E. Sigerist, Baltimore.

Among the papers presented were "Giles Heale, the Mayflower's Surgeon" by Dr. M. Pierce Rucker, Richmond, and "The 150th Anniversary of S. T. Soemmering's 'Organ of the Soul' (1796); the Reaction of his Contemporaries and its Significance Today" by Dr. Walther Riese, Richmond.

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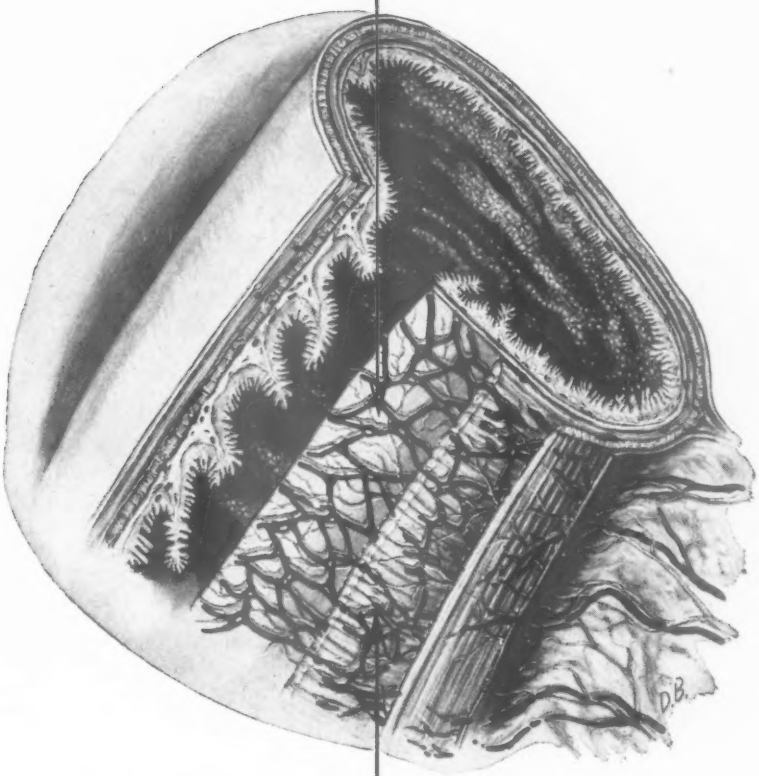

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Dr. William T. Moore,

Class of 1938, University of Virginia, is associated with Dr. H. C. Spalding at 820 West Franklin Street, Richmond, with practice limited to obstetrics and gynecology. He was recently released from the Service.

Dr. Stanley H. Macht,

Formerly of Crewe, has accepted the positions of Chief of the Department of Radiology in the Baltimore City Hospitals and Associate Professor of Radiology on the faculty of the University of Maryland Medical School. He has recently been taking a special course in radiology at the Jefferson Hospital, Philadelphia.

Dr. John Franklin Williams,

Richmond, announces the limitation of his practice to psychosomatic medicine. His offices are in the Medical Arts Building.

Raiford Memorial Hospital Clinics.

Following are schedules of two of the Summer Clinics that are to be held at the Raiford Memorial Hospital, Franklin:

July 25—2:30 P. M.:
"Gastro-Intestinal Disorders"

"Allergic Manifestations in the Gastro-Intestinal Tract," Dr. Oscar Swineford, Assistant Professor of Medicine, University of Virginia, Charlottesville.

"The Treatment of the Ulcer of the Stomach and Differential Diagnosis," Dr. H. B. Mulholland, Professor of Practice Medicine, University of Virginia, Charlottesville.

"Lesions of the Large Intestines," Dr. Clifford F. Gryte, Director of Internal Medicine, Raiford Clinic, Franklin.

August 29:
"Applied Physiology and Advances in Medicine"

"Fluid Balance," Dr. Harold Green, Professor of Physiology, Bowman Gray Medical School, Winston-Salem, North Carolina.

"Present Status of Penicillin," Dr. Harvey Haag, Professor of Pharmacology, Medical College of Virginia, Richmond.

"Vitamins and Minerals," Dr. David Cayer, Associate Professor of Medicine, Bowman Gray Medical School, Winston-Salem, North Carolina.

The American Gynecological Society

Held its sixty-ninth annual meeting at Hershey, Pennsylvania, June 3-5, under the presidency of Dr. Edward A. Schumann, Philadelphia. The following officers were elected: President, Dr. Norris W. Vaux, Philadelphia; 1st vice-president, Dr. M. Pierce Rucker, Richmond; 2nd vice-president, Dr. Walter T. Dannreuther, New York; secretary, Dr. Norman Miller, Ann Arbor; and treasurer, Dr. James H. Miller, Hartford. Dr. Rucker also presented a paper on "Constriction Ring Dystocia".

American Board of Obstetrics and Gynecology.

The next written examination (Part I) for all candidates will be held in various cities of the United States and Canada on Friday, February 7, 1947, at 2:00 P. M. Candidates in military service are requested to keep the Secretary's Office closely informed of changes in address.

Applications are now being received for the 1947 examinations. Closing dates for these applications will be November 1, 1946.

For further information and application blanks address Paul Titus, M.D., Secretary, 1015 Highland Building, Pittsburgh 6, Pennsylvania.

Appointment in E. E. N. T.

An appointment in E. E. N. T. is available October 1st at the Raiford Clinic, Franklin, Virginia. Address the Administrator, Raiford Memorial Hospital, Franklin, for further details. (*Adv.*)

The American Congress of Physical Medicine

Will hold its twenty-fourth annual scientific and clinical session September 4, 5, 6 and 7, inclusive, at the Hotel Pennsylvania in New York. Scientific and clinical sessions will be given each day. All sessions will be open to members of the medical profession in good standing with the American Medical Association. In addition to the scientific sessions, the annual instruction courses will be held September 4, 5, and 6. These courses will be open to physicians and to therapists registered with the American Registry of Physical Therapy Technicians. For information concerning the convention and the instruction course, address the American Congress of Physical Medicine, 30 North Michigan Avenue, Chicago 2, Illinois.

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Radio Series Dedicated.

Development of wider public understanding and appreciation of the contribution made by the medical profession and by medical research to the world's health and welfare is the objective of a new series of radio programs inaugurated over the Columbia Broadcasting System on June 4, at 9:30 P. M., Eastern Daylight Saving Time.

The half-hour program, known as "Encore Theater", presents radio dramatizations of famous films, novels, and biographies, dealing with medicine's immortals, as well as with the work, achievements and struggles of thousands of members of the medical profession who, although by-passed by fame, daily are making substantial contributions to the prevention and cure of disease, often at great personal sacrifice. Sponsor of the program is Schenley Laboratories, Inc., which for the past two years has sponsored a somewhat similar program dedicated to the medical profession, "The Doctor Fights".

The programs are designed to underline the scientific achievements of the medical profession, while stressing the human warmth and sympathy which often prompts members of the profession to sacrifice health and even personal life in order to serve others.

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Appointment in Pediatrics.

An appointment in Pediatrics is available immediately at Raiford Clinic, Franklin, Virginia. Address the Administrator, Raiford Memorial Hospital, Franklin, for further details. (*Adv.*)

OBITUARIES

Dr. William Curtis Gibson,

Prominent Suffolk physician, died June 10th, having been in failing health for more than a year. He was fifty-nine years of age and received his medical degree from the University of Pennsylvania in 1910. Dr. Gibson had practiced in Suffolk since his graduation, was formerly surgeon for the Norfolk and Western Railroad at Suffolk and for the Southern and Virginian Railways, having retired because of his health. He served in the Navy during World War I. Dr. Gibson had been a member of the Medical Society of Virginia for thirty-six years. His wife and a son survive him.

Dr. Ashby Clifford Byers,

Dean of Rockingham County physicians, died in Harrisonburg June 13th from a heart condition from which he had suffered for some time. He was seventy-one years of age and a graduate in medicine from the University of Maryland, class of 1901. Dr. Byers had practiced in Rockingham County since the horse and buggy days and had officiated at the birth of more than 6,000 children. He was active in civic and medical affairs, having served as coroner and health officer of Harrisonburg and Rockingham County. Dr. Byers was formerly a member of the Medical Society of Virginia. His wife and seven children survive him.

Dr. George F. Holler,

Waynesboro, died June 16th at a veterans hospital, where he had been a patient for two years. He was seventy years of age and graduated from the former Atlanta (Ga.) College of Physicians and Surgeons in 1901. Dr. Holler was a veteran of World War I and practiced in Waynesboro for twenty years after leaving the Service. He was formerly a member of the Medical Society of Virginia. A son and a daughter survive him.

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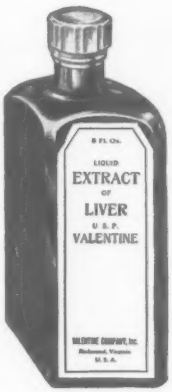

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Poison Reaction to Acid Used in "Cold Wave".

An acid used in the process of hair curling known as a "cold wave" has been found to produce symptoms of poisoning in allergic and anemic persons, according to Lawrence H. Cotter, M.D., of New York.

Writing in the June 15 issue of *The Journal of the American Medical Association*, Dr. Cotter, who is from the Department of Medicine, College of Physicians and Surgeons, Columbia University and the Presbyterian Hospital in New York, says that the "cases in which a toxic reaction has been observed appear to be on the increase."

Experience with patients having thioglycolic acid poisoning indicates, the author says, that "persons suffering from allergies and anemias are the most likely victims, but the acid has an established affinity for the protein molecule, and liver damage to some extent may be anticipated from prolonged exposure in any individual". However, in the majority of cases recovery occurs without permanent liver damage when the exposure is promptly terminated.

Among the several case histories cited by the author is one of a 52 year old woman who "had not handled any thioglycolic acid preparation but had a 'cold wave' of her own hair. As soon as the acid solution was applied she felt an intolerable burning sensation, which persisted for three days in spite of all attempts to wash off the acid. She also had severe cramps and itching all over the body." A week after receiving a second patch test from her doctor she had swelling of the hands and feet and enlargement of the armpit lymph nodes, as well as the itching and burning, and her hair came out in large patches.

When seen in the laboratory, this woman had dark patches on her skin and denuded areas on her scalp. She appeared emaciated and nervous. Eventually, the author says, "her symptoms cleared up except for an intermittent burning sensation of the scalp."

The author concludes: "Now that this product is being sold in the chain stores, its indiscriminate use will result in an increased incidence of poisonings, many of which are already finding their way to the courts. Adequate labeling and understanding of the dangers involved are imperative.

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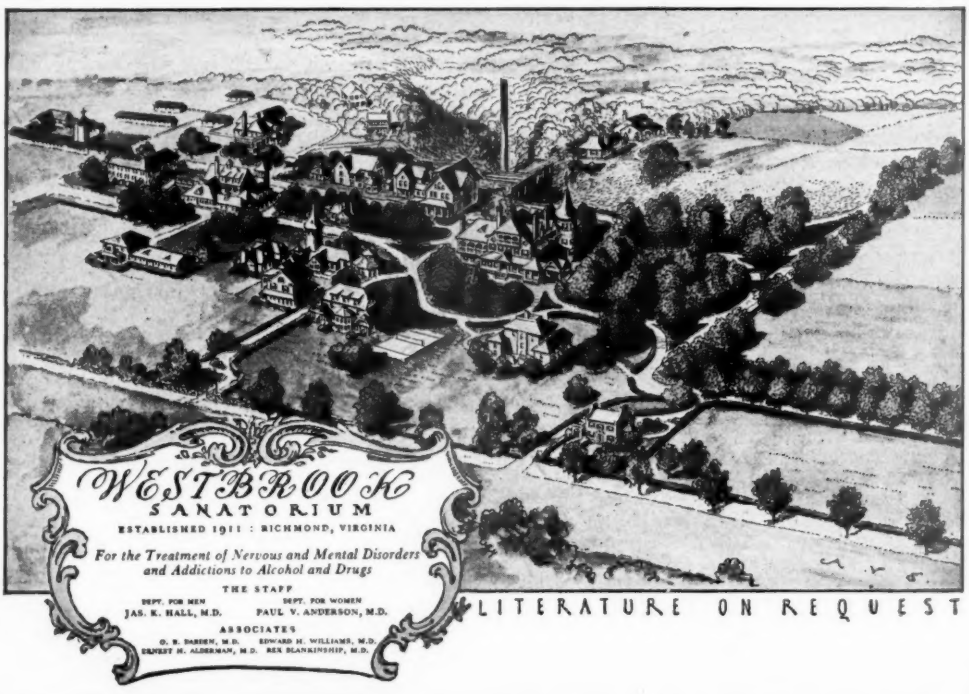
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